SyncMaster

SERIES 5 | TB550

LED TV MONITOR

(MFM TV)

user manual

Thank you for purchasing this Samsung product.
To receive more complete service, please register your product at

www.samsung.com/register

Model _____ Serial No. _____

SAMSUNG

Figures and illustrations in this User Manual are provided for reference only and may differ from actual product appearances. Product design and specifications may be changed without notice.

Digital TV notice

1. Functionalities related to Digital TV (DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you are able to access to a compatible DVB-C (MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.
2. DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable. However, some differentiated features like EPG (Electric Programme Guide), VOD (Video On Demand) and so on, are not included in this specification. So, they cannot be workable at this moment.
3. Although this TV set meets the latest DVB-T and DVB-C standards, as of [August, 2008], the compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts cannot be guaranteed.
4. Depending on the countries/areas where this TV set is used some cable-TV providers may charge an additional fee for such a service and you may be required to agree to terms and conditions of their business.
5. Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with some cable service providers.
6. For more information, please contact your local Samsung customer care centre.

✎ The reception quality of TV may be affected due to differences in broadcasting method between the countries. Please check the TV performance in the local SAMSUNG Authorized Dealer, or the Samsung Call Centre whether it can be improved by reconfiguring TV setting or not.

Still image warning

Avoid displaying still images (like jpeg picture files) or still image element (like TV programme logo, panorama or 4:3 image format, stock or news bar at screen bottom etc.) on the screen. Constant displaying of still picture can cause ghosting of LED screen, which will affect image quality. To reduce risk of this effect, please follow below recommendations:

- Avoid displaying the same TV channel for long periods.
- Always try do display any image on full screen, use TV set picture format menu for best possible match.
- Reduce brightness and contrast values to minimum required to achieve desired picture quality, exceeded values may speed up the burnout process.
- Frequently use all TV features designed to reduce image retention and screen burnout, refer to e-Manual for details.

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Check the Symbol!

Note

Indicates additional information.

Step by Step Guide

Check here for instructions on how to open the relevant submenu within the OSD (on screen display).

Safety Precautions

Icons used for safety precautions

WARNING	Failing to follow the precautions marked with this sign may result in a serious injury or even a fatality.
CAUTION	Failing to follow the precautions marked with this sign may result in a personal injury or property damage.

Do not perform.

Must be followed.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

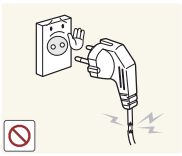
This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.a

Power Related

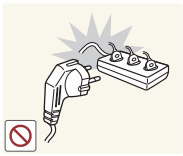
✎ The following images are for your reference and may differ depending on models and countries.

Warning



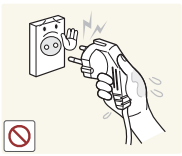
Avoid using a damaged power cord or plug or a loose power outlet.

- Otherwise, it may result in electric shock or fire.



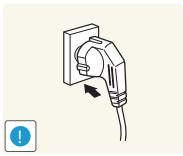
Avoid connecting multiple electric appliances to a single wall outlet.

- Otherwise, it may result in fire due to overheating of the wall outlet.



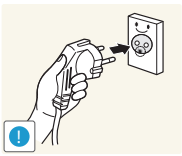
Avoid plugging in or unplugging the power supply with wet hands.

- Otherwise, it may result in electric shock.



Plug the power plug in firmly.

- Otherwise, it may result in fire.

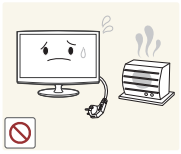


Make sure to connect the power cord to a grounded wall outlet (for insulation class 1 equipment only).

- Otherwise, it may result in electric shock or injury.

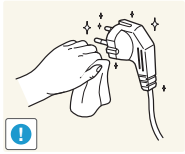
Avoid bending or twisting the power cord excessively and avoid placing heavy objects on the cord.

- Otherwise, it may result in electric shock or fire due to a damaged power cord.



Keep the power cord and the product away from a heater.

- Otherwise, it may result in electric shock or fire.



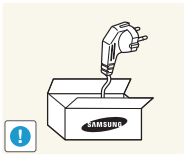
If the pins of the power plug or the wall outlet are covered in dust, clean it using a dry cloth.

- Otherwise, it may result in fire.

Caution

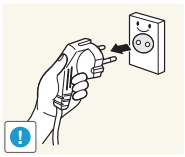
Avoid unplugging the power plug while the product is operating.

- Otherwise, it may damage the product due to electric shock.



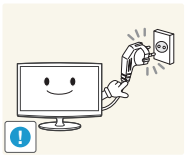
Make sure to use only the power cord supplied by our company. In addition, do not use the power cord of another electric appliance.

- Otherwise, it may result in electric shock or fire.



When unplugging the power plug from the wall outlet, make sure to hold it by the plug and not by the cord.

- Otherwise, it may result in electric shock or fire.

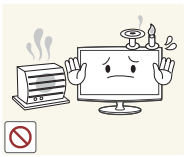


Connect the power plug to a wall outlet that can be easily reached.

- When a problem occurs with the product, you must unplug the power plug to cut the power off completely. You cannot cut the power off completely using only the power button on the product.

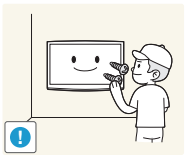
Installation Related

Warning



Avoid placing burning candles, mosquitorepellentor cigarettes on the product.

- Otherwise, it may result in fire.

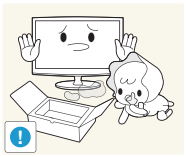


Ask an installation engineer or relevant company to install the product onto the wall.

- Otherwise, it may result in injury.
- Make sure to use the specified wall mount.

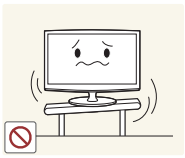
Avoid installing the product in a badly-ventilated location such as inside a bookshelf or closet.

- Otherwise, it may result in fire due to internal over-heating.



Keep the plastic bags used to pack the product away from children.

- If children place the plastic bags over their heads, they may suffocate.

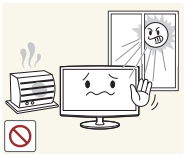


Avoid installing the product in a location that is unstable or exposed to excessive vibration such as on an unstable or slanted shelf.

- The product may fall and this may result in damage to the product or injury.
- If you use the product in a location exposed to excessive vibrations, it may result in a problem with the product or fire.

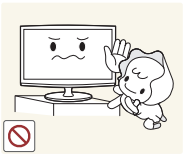
Avoid installing the product in a location exposed to dust, moisture (sauna), oil, smoke or water (rain drops) and installing it within a vehicle.

- This may result in electric shock or fire.



Avoid installing the product in a location exposed to direct sunlight and installing the product near a heat source such as a fireplace or heater.

- This may shorten the product life cycle or cause fire.

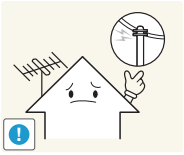


Avoid installing the product where children may reach it.

- If a child touches the product, the product may fall and this may result in injury.
- Since the front part is heavier, install the product on a flat and stable surface.

Bend the outdoor aerial cable downwards at the location where it comes in the house so that rainwater does not flow in.

- If rainwater enters the product, it may result in electric shock or fire.



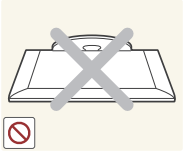
Install the aerial far away from any high voltage cables.

- If the aerial touches or falls onto a high voltage cable, it may result in electric shock or fire.

Caution

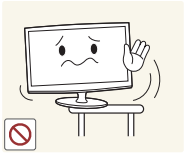
Do not let the product drop while moving it.

- This may result in a problem with the product or injury.



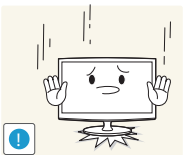
Do not place the product face down on the floor.

- This may damage the panel of the product.



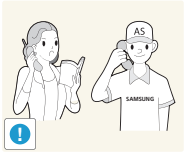
When installing the product on a console or shelf, make sure that the front of the product does not protrude out of the console or shelf.

- Otherwise, this may cause the product to fall off and result in a malfunction or injury.
- Make sure to use a cabinet or shelf suitable to the size of the product.



When putting the product down, handle it gently.

- Otherwise, it may result in a problem with the product or injury.

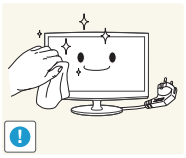


If the product is installed in a location where the operating conditions vary considerably, a serious quality problem may occur due to the surrounding environment. In this case, install the product only after consulting one of our service engineers about the matter.

- Places exposed to microscopic dust, chemicals, too high or low temperature, high humidity, airports or stations where the product is continuously used.

Cleaning Related

Warning



Before cleaning the product, unplug the power cord.

- Otherwise, it may result in electric shock or fire.

When cleaning the product, do not spray water directly over the product parts.

- Make sure that water does not enter the product.
- Otherwise, it may result in fire, electric shock or a problem with the product.

Caution

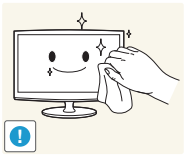
Avoid spraying cleansing agent directly onto the product.

- This may result in discolouration or cracking of the exterior of the product or the panel coming off.

When cleaning the product, disconnect the power cord and clean the product with the supplied cleaning cloth.

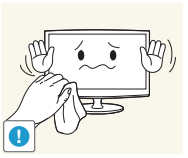
- Avoid using chemicals such as wax, benzene, alcohol, thinner, mosquitorepellent, fragrance, lubrication or cleansing agent when cleaning the product.

  This may result in the exterior being deformed or the print being removed.



If you can't get the product clean with just the supplied cloth, use a soft, damp cloth with a "monitor-exclusive cleansing agent" and wipe the product with it.

- If no monitor-exclusive cleansing agent is available, dilute a cleansing agent with water at a ratio of 1:10 before cleaning the product.



Since the exterior of the product is easily scratched, be sure to use the supplied cleansing cloth.

Usage Related

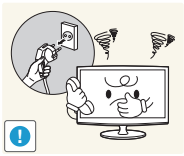
Warning

Since a high voltage runs through the product, never disassemble, repair or modify the product yourself.

- Otherwise, it may result in fire or electric shock.
- If the product needs to be fixed, contact a service centre.

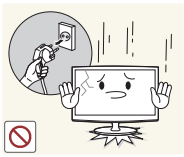
To move the product, turn the power off and unplug the power cord, the aerial cable and any other wires connected to the product.

- Otherwise, it may result in electric shock or fire due to the damaged power cord.



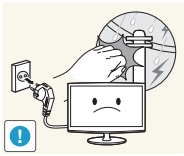
If the product generates a strange noise, a burning smell, or smoke, unplug the power plug immediately and contact a service centre.

- Otherwise, it may result in electric shock or fire.



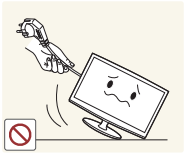
If you drop the product or the case is damaged, turn the power off and unplug the power cord. Contact a service centre.

- Otherwise, it may result in fire or electric shock.



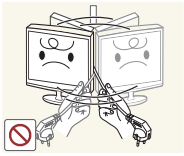
When thunder or lighting occurs, unplug the power cord and under no circumstance touch the aerial cable as this is dangerous.

- Otherwise, it may result in electric shock or fire.



Avoid moving the product by pulling the power cord or aerial cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.

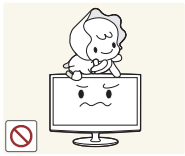


Avoid lifting up or moving the product by holding only the power cord or signal cable.

- Otherwise, it may result in electric shock, fire or a problem with the product due to damage to the cable.

Take care not to block the vent by a table cloth or curtain.

- Otherwise, it may result in fire due to internal overheating.

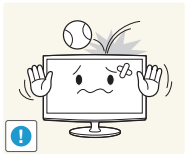


Avoid letting children hang or climb onto the product.

- Otherwise, it may result in the product falling and this may result in injury or death.

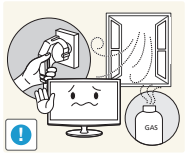
Avoid placing objects such as toys and cookies on top of the product.

- If a child hangs over the product to grab an object, the object or the product may fall and this may result in injury or even death.



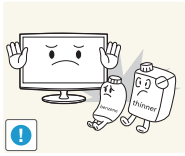
Avoid dropping an object over the product or cause impact to the product.

- Otherwise, it may result in electric shock or fire.



When a gas leak occurs, do not touch the product or the power plug and ventilate immediately.

- A spark may result in an explosion or fire.
- During a thunder or lighting storm, do not touch the power cord or aerial cable.



Avoid using or placing inflammable spray or objects near the product.

- This may result in an explosion or fire.

Avoid inserting metal objects such as a chopsticks, coins or hairpins, or inflammable objects into the product (the vents, ports, etc).

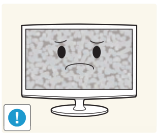
- If water or substances enters the product, turn the power off, unplug the power cord and contact a service centre.
- Otherwise, it may result in a problem with the product, electric shock or fire.

Avoid placing a liquid container such as a vase, flowerpot, beverage, cosmetics or drugs, or a metal object over the product.

- If water or substances enter the product, turn the power off, unplug the power cord and contact a service centre.
- Otherwise, it may result in a problem with the product, electric shock or fire.

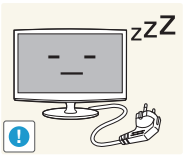
Do not press down hard on the product. The product may become deformed or damaged.

⚠ Caution



Displaying a still image for a long time may create a persistent image or stain on the screen.

- If you do not use the product for a long time, use the power-saving mode or set the screensaver to the moving picture mode.

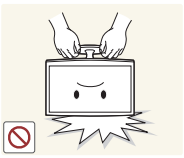


When not using the product for a long time such as leaving your home, unplug the power cord from the wall outlet.

- Otherwise, it may cause dust accumulation and result in fire caused by overheating or short circuit or result in an electric shock.

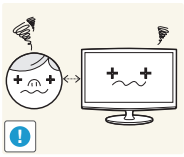
Set the appropriate resolution and frequency for the product.

- Otherwise, it may result in eye strain.



Avoid turning the product upside down or move the product holding only the stand.

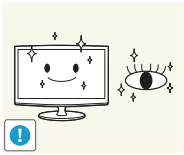
- This may cause the product to fall, resulting in damage to the product or injury.



Watching the product from too close a distance continuously may damage your eyesight.

Avoid using a humidifier or cooker near the product.

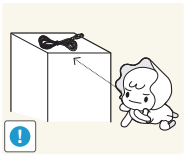
- Otherwise, it may result in electric shock or fire.



It is important to give your eyes some rest (5 minutes every hour) when viewing the product screen for long periods of time.

- This will alleviate any eye strain.

Since the display panel is hot after using it for a long time, do not touch the product.



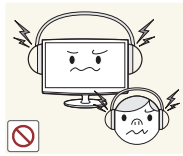
Keep the small accessories in a location out of the reach of children.

Take care when adjusting the angle of the product or the height of the stand.

- If your hand or finger is caught, you may be injured.
- If the product is tilted excessively, the product may fall and this may result in injury.

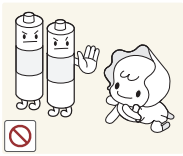
Avoid placing a heavy object over the product.

- Otherwise, it may result in a problem with the product or injury.



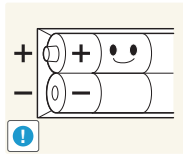
When using headphones or earphones, do not turn the volume too high.

- Having the sound too loud may damage your hearing.



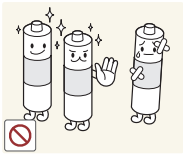
Be careful that children do not place the batteries in their mouths when removed from the remote control. Place the battery in a location that children or infants cannot reach.

- If children have had the battery in their mouths, consult your doctor immediately.



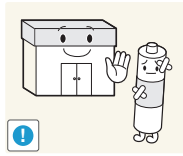
When replacing the batteries, insert them with right polarity (+, -).

- Otherwise, the battery may become damaged or it may cause fire, personal injury or damage due to leakage of the internal liquid.



Use only specified standard batteries. Do not use new and used batteries together.

- This may cause a battery to break or leak and may cause fire, injury, or contamination (damage).



The batteries (and rechargeable batteries) are not ordinary refuse and must be returned for recycling purposes. The customer is responsible for returning the used or rechargeable batteries for recycling.

- The customer can return used or rechargeable batteries to a nearby public recycling centre or to a store selling the same type of the battery or rechargeable battery.

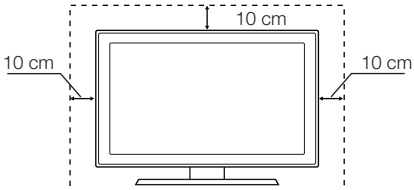
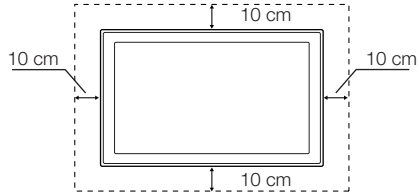
Getting Started

Providing Proper Ventilation for Your Product

When you install your product, maintain a distance of at least 4 inches between the product and other objects (walls, cabinet sides, etc.) to ensure proper ventilation. Failing to maintain proper ventilation may result in a fire or a problem with the product caused by an increase in its internal temperature.

✎ Whether you install your product using a stand or a wall-mount, we strongly recommend you use parts provided by Samsung Electronics only.

- If you use parts provided by another manufacturer, it may cause difficulties with the product or result in injury caused by the product falling.

Installation with a stand.	Installation with a wall-mount.
	

Other Warnings

✎ The actual appearance of the product may differ from the images in this manual, depending on the model.

✎ Be careful when you touch the product. Some parts can be somewhat hot.

List of Features

- SMART HUB: Your gateway to all your content, integrated in one place.
  - Provides diverse entertainment choices.
  - Lets you control your entertainment life with an easy-to-use, user friendly user interface.
  - Gives you easy access to diverse apps, with more being added every day.
  - Lets you customize your product by grouping and sorting apps to your taste.
- AllShare Play: Lets you access, view, or play photos, videos, or music located on USB devices, digital cameras, cell phones, and PCs. PCs and cell phones can be accessed wirelessly, through your wireless network.
- Anynet+ (HDMI-CEC): Allows you to control all connected Samsung devices that support Anynet+ with your Samsung product's remote.

Getting Started

Accessories and Cables

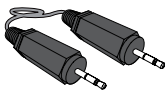
✎ Please make sure the following items are included with your product. If any items are missing, contact your dealer.

✎ The items' colours and shapes may vary depending on the model.

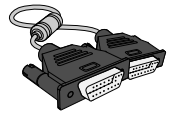
✎ Make sure that there are no accessories hidden behind or under packing materials after you open the box.

⚠ **[CAUTION] INSERT SECURELY LEST SHOULD BE DETACHED IN SET**

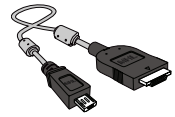
- Remote Control & Batteries (AAA x 2)
- User Manual (CD)
- Warranty Card / Safety Guide / Quick Setup Guide
- Cleaning Cloth
- Power Cord
- Cable Holder



Stereo Cable



D-Sub Cable

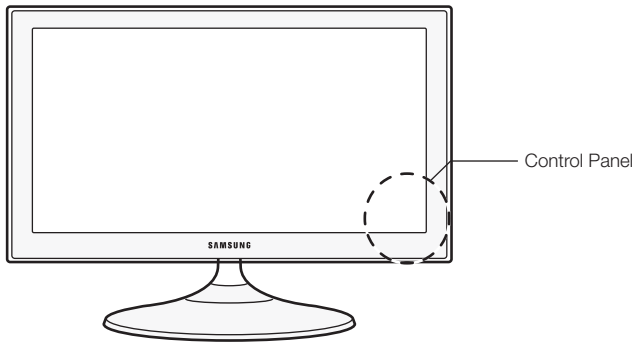


MHL Cable

Getting Started

Using the Control Panel

✎ The product colour and shape may vary depending on the model.



SOURCE	Toggles between all the available input sources. In the on-screen menu, use this button as you would use the button on the remote control.
MENU	Displays an on-screen menu, the OSD (on screen display) of your product's features.
– +	Adjusts the volume. In the OSD, use the – + buttons as you would use the ◀ and ▶ buttons on the remote control.
∧ P ∨	Changes the channels. In the OSD, use the ∧ P ∨ buttons as you would use the ▲ and ▼ buttons on the remote control.
(Power)	Turns the product on or off.
Remote control sensor	Aim the remote control towards this spot on the product.
Power Indicator	Blinks and turns off when the power is on and lights up in standby mode.

Standby mode

Your product enters Standby mode when you turn it off and continues to consume a small amount of electric power. To be safe and to decrease power consumption, do not leave your product in standby mode for long periods of time (when you are away on vacation, for example). It is best to unplug the power cord.

Getting Started

Using Smart Hub

Smart Hub provides easy, on-screen access to four functions that let you manage and access channels, set favourite channels, access photos, videos, or music on USB devices, cameras, and PCs, select video sources, and set the product to turn on automatically when a show you want to watch is on. The four functions are listed below:

- Web Browser: Lets you browse the Internet.
- Schedule Manager: Lets you schedule shows and channels for viewing.
- Source: Lets you select a connected external video source to view.
- AllShare Play: Lets you access, view, or play photos, videos, or music located on USB devices, digital cameras, cell phones, and PCs. PCs and cell phones can be accessed wirelessly, through your wireless network.

Smart Hub also provides an easy-to-use gateway to a host of on-line media and entertainment including apps from the Samsung Apps store, streaming videos and movies, kids sites, and more.

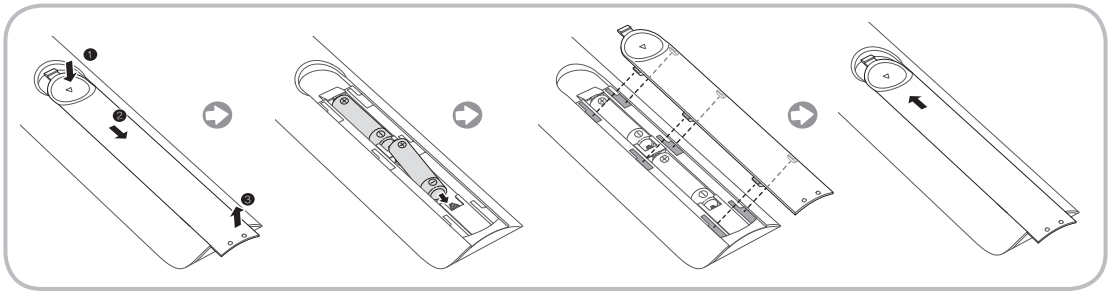
✎ To access Smart Hub, press the button on your remote.

✎ For more information about Smart Hub, see page 94.

The Standard Remote Control

Installing batteries (Battery size: AAA)

Match the polarity of the batteries to the symbols in the battery compartment.



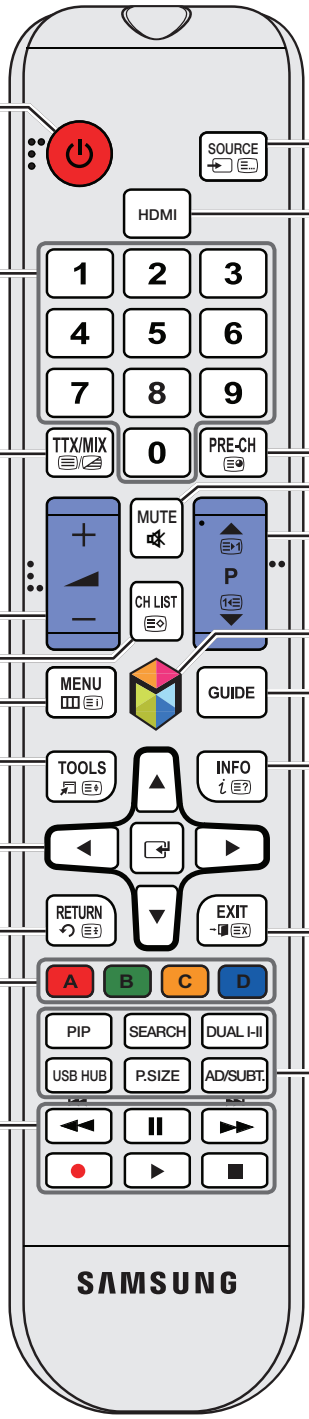
✎ NOTE

- Install the batteries so that the polarity of the batteries (+/-) matches the illustration in the battery compartment.
- Use the remote control within 23 feet of the product.
- Bright light may affect the performance of the remote control. Avoid using it near fluorescent lights or neon signs.
- The colour and shape of the remote may vary depending on the model.

Getting Started

The Standard Remote Control Buttons

✎ This remote control has Braille points on the Power, Channel, and Volume buttons and can be used by visually impaired persons.



Turns the product on and off.

Displays and selects the available video sources. (page 29)

Selects the HDMI mode directly.

Gives direct access to channels.

Alternately select Teletext ON, Double, Mix or OFF.

Returns to the previous channel.

Cuts off the sound temporarily.

Changes channels.

Adjusts the volume.

Displays channel lists on the screen. (page 47)

Opens the OSD (Menu).

Brings up the Smart Hub applications. (page 94)

Starts recommended search word and search function. (page 40)

Quickly select frequently used functions. Use this button in a specific feature.

Displays information on the product screen.

Moves the cursor, selects the on-screen menu items, and changes the values seen on the TV's menu.

Returns to the previous menu.

Exits the menu.

Use these buttons according to the directions on TV's screen.

Use these buttons in a specific feature.

PIP: Turns the PIP on or off. (page 82)

SEARCH: Support to recommendation search word and search function.

DUAL I-II: Sound effect selection.

USB HUB: You can set the Connect USB Hub to function by choosing product or PC. (page 87)

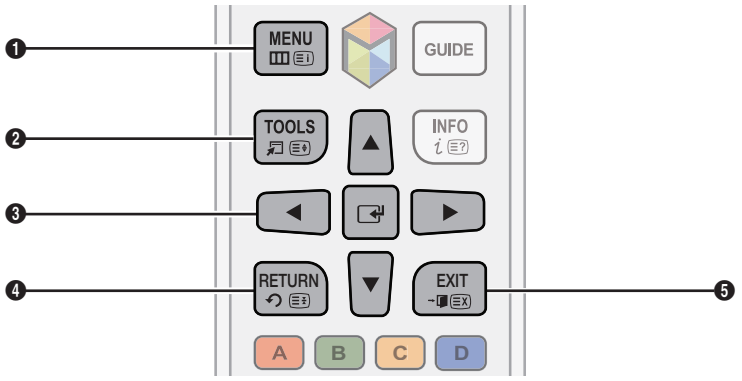
P.SIZE: Lets you select the Picture Size. (pages 34, 55)

AD/SUBT.: Turns the audio description on and off. This is not available in some locations. / Displays digital subtitles.

Getting Started

How to Navigate Menus

Your product's Main and Tools menus contains functions that let you control the product's features. For example, in the Main menu you can change the size and configuration of the picture, its brightness, its contrast and so on. There are also functions that let you control the product's sound, channel configuration, energy use, and a host of other features. To access the main, on-screen menu, press the MENU button on your remote. To access Tools menus, press the TOOLS button. Tools menus are available when the TOOLS menu Icon is displayed on the bottom right of the screen



❶ MENU button: Displays the main on-screen menu.

❷ TOOLS button: Displays the Tools menus when available.

❸ and Direction buttons: Use the Direction buttons to move the cursor and highight an item. Use the button to select an item or confirm the setting.

❹ RETURN button: Returns to the previous menu.

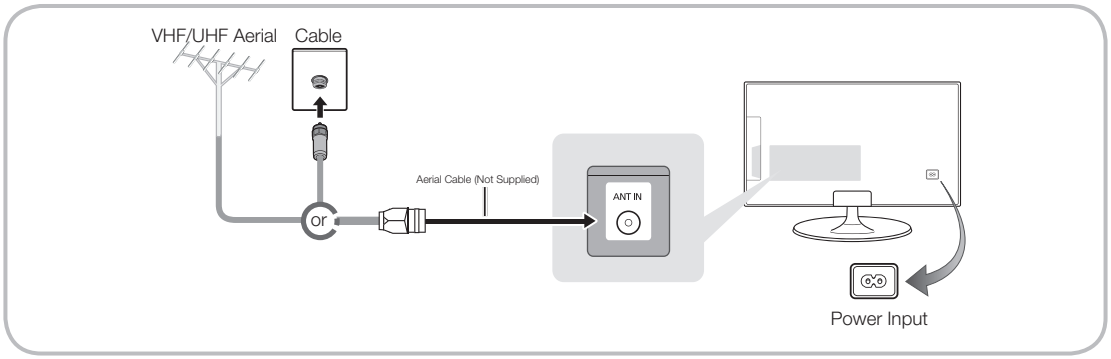
❺ EXIT button: Exits the on-screen menu.

How to Operate the Main Menu (OSD - On Screen Display)

The access steps may differ depending on the menu option you select.

1	MENU	The main menu options appear on the screen: Picture, Sound, Channel, Network, System, Support.
2	▲ / ▼	Select a main menu option on the left side of the screen with the ▲ or ▼ button.
3		Press to access the sub-menus.
4	▲ / ▼	Select the desired submenu with the ▲ or ▼ button.
5	▲ / ▼ / ◀ / ▶	Adjust the value of an item with the ◀, ▶, ▲, or ▼ button. The adjustment in the OSD may differ depending on the selected menu.
6		Press to confirm the selection.
7	EXIT	Press EXIT.

Connecting the Power Cord and the Aerial or Cable Connection



✎ Plug the power cord into a wall outlet only after you have made all other connections.

✎ If you are connecting your product to a cable or satellite box using HDMI, Component, or Composite connections, you do not need to connect the ANT IN jack to an aerial or a cable connection.

✎ Use caution when you move or swivel the product if the aerial cable is tightly connected. You could break the aerial jack off the product.

Getting Started

Configuring the Basic Settings in Initial Setup

When you turn the product on for the first time, a sequence of screens and on-screen prompts will assist you in configuring the product's basic settings. Plug the power cord into a wall outlet, and then press the ⏻ button to turn on the product.

✎ Setup is available only when the Source is set to TV. See "Changing the Input Source" (page 29).

✎ To return to the previous step in the Setup sequence, select Previous.

✎ If you are not using a cable box or satellite box, make sure you have connected the product to an aerial or cable connection before you turn on the product. See page 19 for instructions.

✎ If you want to configure a network connection, make sure you've connected the Samsung Wireless LAN Adapter or a LAN cable to your TV. See pages 65 and 66 for instructions.

1	Menu Language: Select a Language.	After you press the ⏻ button, the Start screen appears. Select Next to continue. The Menu Language screen appears. Select the menu language you want using your remote, and then select Start. The product will display on-screen menus using the language you select beginning with the next step in the Setup process.
2	Use Mode: Select the Home Use Mode.	On the Use Mode screen, select the Home Use mode using your remote, and then select Next. The Network Settings screen appears. ✎ Store Demo mode is for retail environments only. If you select Store Demo, some functions will not work, and the product will reset all functions to their factory default after a certain period of time. For more information about Store Demo, go to the end of this section.
3	Network Settings: Configure the network settings ✎ To configure later, select Skip. You can set up the network connection later using the on-screen Network menu.	To configuring your network settings, select Next using your remote, and then go to 3A - Wireless Network or 3B - Wired Network on the next page. If you do not know your network configuration information or want to configure the settings later, or do not have a network, select Skip, and then go to 6 - Auto Tuning (1) on page 49. To configure network settings later, refer to the Network Connection sections in this manual (pages 68 and 71).

3A **Wireless Network**

1. The product searches for and then displays all the wireless networks within range. When done, it displays a list of the networks. In the list of networks, move the Highlight to select a network, and then select Next. If the selected network requires a Security Key, the Security Key screen appears.

   ✎ If you have a WPS(PBC) compatible router, select WPS(PBC) instead, and then follow the directions on the screen. When done, go to Step 4.

2. Enter your network security key or WPS PIN using your remote.

   ✎ Enter numbers and letters using your remote.

   - If you are using the standard remote, you can enter numbers by pressing the number buttons on the remote.
   - To enter a letter, move the Highlight to the letter, and then select it. You can enter numbers in the same fashion if you choose.

   ✎ To display capital letters (or redisplay small letters if capital letters are displayed), select Caps or Shift.

   ✎ To display symbols and punctuation, select ⭐. To redisplay letters, select ⭐ again.

3. When done, select Next if you have entered a security key or WPS PIN if you have entered a WPS PIN.

4. The product checks the wireless connection. If the connection is successful, the You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider. message appears. Select Next, and then go to 4 Software Upgrade Step.

   ✎ If the connection fails, select Previous, repeat Step 1 and 2, carefully re-enter your security key or WPS PIN, then repeat Steps 3 and 4. If it fails again, select Next on the “Connection Failed” screen, and then go to 6 -Auto Tuning (1) on the next page. Configure your network later through Network Settings in the product’s Menu. For more information, refer to the Network Connection sections in this manual (pages 68 and 71).

3B **Wired Network**

The product checks the network connection, then displays the You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider. message appears. Select Next. The Software Upgrade screen appears.

4	Software Upgrade: Update the software to the latest version ✎ To update later, select Skip.	When Network Settings is complete, your product will check for a new software version automatically. If new software is available, the product downloads and installs the new software. When the download is complete, select Next. ✎ If you want to upgrade later, select Skip. For more information, refer to Software Upgrade section of this manual (page 90) ✎ This may take some time, depending on your network status. ✎ You can only upgrade software if your product has an active network connection. ✎ If no new update software is available, a no new updates message appears on the screen. Select OK.
5	Select Country. (Depending on the country)	Select the appropriate country. • After selecting the country in the country menu, some models may proceed with an additional option to setup the pin number.
6	Auto Tuning (1): Select where your product signal comes from.	Let's find and store channels on your TV. Do you need to search for channels? • Yes, I need to.: All the channels available will be found and stored on your TV. • No, I don't need to.: My set-top box provides all the channels that are available, so I don't need to search for channels.
7	Auto Tuning (2): Select the search options.	1. Select Air or Cable using your remote. A check appears on your selection. When done, select Next. 2. If you selected Air, go to 7 - Auto Tuning (3). 3. If you selected the Cable, the Search Mode screen appears. Scans for all channels with active broadcast stations and stores them in the product. ✎ If you select Quick, you can set up the Network, Network ID, Frequency, Modulation, and Symbol Rate manually by the remote control. Network: Selects the Network ID setting mode among Auto or Manual. Network ID: When Network is Manual, you can set up Network ID. Frequency: Displays the frequency for the channel. (Differs in each country) Modulation: Displays available modulation values. Symbol Rate: Displays available symbol rates. 4. When done, select Next.
8	Auto Tuning (3): Channel memorization	Channel memorization stars. Channel memorization can take up to 45 minutes, depending on your cable system. For more information, refer to Auto Tuning section of this manual. (page 49) ✎ Select Stop at any time to halt the memorization process.

9	Clock: Set the Clock	Select Auto or Manual, and then select Next. **Auto** If you selected Auto, the product will automatically download the correct time from a digital channel. The Time Zone screen will appear. Select your Time Zone, and then select Next. The DST (Daylight Savings Time) screen will appear. The DST function sets the time ahead one hour to adjust the clock for Daylight Savings Time. Select On if you want to turn the DST adjustment on. Select Off to turn off the DST adjustment. You can also turn the DST function on through the product's on screen menu (Menu → System → Time → Clock → DST). **Manual** If you selected Manual, you'll go to the Clock screen. Select Date or Time. You can set the current date and time using your remote. When done setting the Date and Time, select Next.
10	Setup Complete	Review the Setup data, and then select Close to finish. ✎ The completed settings are displayed.

If You Want to Rerun Setup...

Menu → System → Setup

If You Want to Turn the Store Demo Mode On or Off.

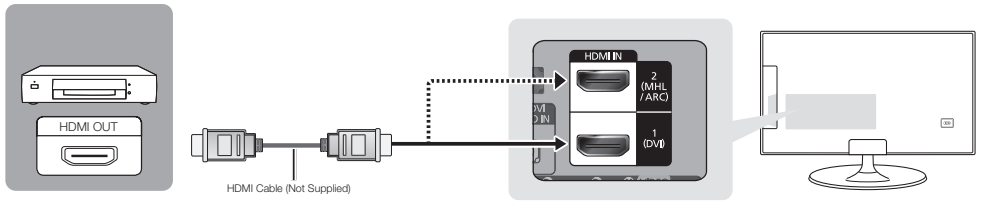
To set or unset Store Demo mode outside of Setup, press the volume button on the product. When you see the volume in the OSD, press and hold MENU button on the product for 5 seconds.

Connecting to AV Devices (Blu-ray Players, DVD Players, etc.)

Using an HDMI Cable for an HD connection (up to 1080p, HD digital signals)

For the best quality HD picture, we recommend using an HDMI connection.

Use with DVD players, Blu-ray players, HD cable boxes, and HD Set-Top-Box satellite receivers.



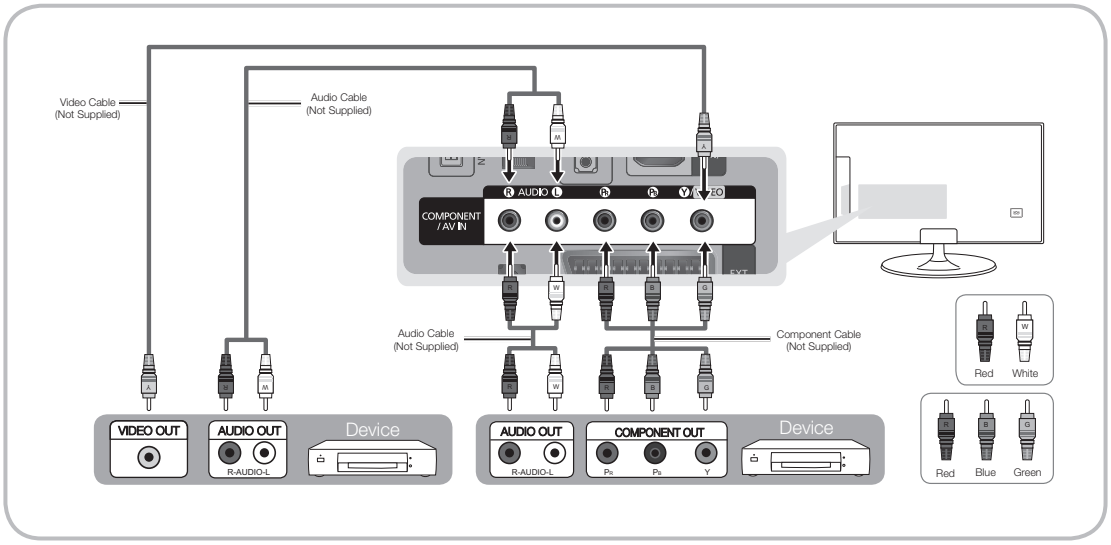
✎ **HDMI IN 1 (DVI)**, **HDMI IN 2 (MHL / ARC)**

- For the best picture and audio quality, connect digital devices to the product using HDMI cables.
- An HDMI cable supports digital video and audio signals, and does not require an audio cable.
  - To connect the product to a digital device that does not support HDMI output, use an HDMI to DVI cable and audio cables.
- If you connect an external device to the product that uses an older version of HDMI, the video and audio may not work. If this occurs, ask the manufacturer of the device about the HDMI version and, if it is out of date, request an upgrade.
- Be sure to purchase a certified HDMI cable. Otherwise, the picture may not display or a connection error may occur.
- We recommend using a basic high-speed HDMI cable or an HDMI cable that is Ethernet compatible. Note that this product does not support the Ethernet function via HDMI.
- This product supports the ARC (Audio Return Channel) functions via an HDMI cable. Note that the ARC function is supported by the **HDMI IN 2 (MHL / ARC)** port only.
- The ARC function allows digital audio to output via the **HDMI IN 2 (MHL / ARC)** port on the product. It can be enabled only when the product is connected with an audio receiver that supports the ARC function.
- This product supports the Mobile High-Definition Link (MHL) function via an HDMI-MHL cable. Note that the MHL function is supported by the **HDMI IN 2 (MHL / ARC)** port only.
- The MHL function lets you display a mobile device's screen via the **HDMI IN 2 (MHL / ARC)** port on the product. It can be enabled only when the product is connected with a mobile device that supports the MHL function.
- When you use MHL devices via a MHL cable, Picture Size is set to Screen Fit automatically. But if you use MHL devices via an HDMI cable, Picture Size is not set to Screen Fit automatically. To view an original size, select Screen Fit in the Picture Size menu (Menu → Picture → Picture Size).
- If you use MHL devices via an HDMI cable, The product will be recognized as the HDMI input. In this case, the product may work differently than when you use MHL devices via a MHL cable.

Connections

Using a Component Cable (up to 1080p HD signals) or an Audio/Video Cable (480i analog signals only)

Use with DVD players, Blu-ray players, cable boxes, STB satellite receivers, VCRs.

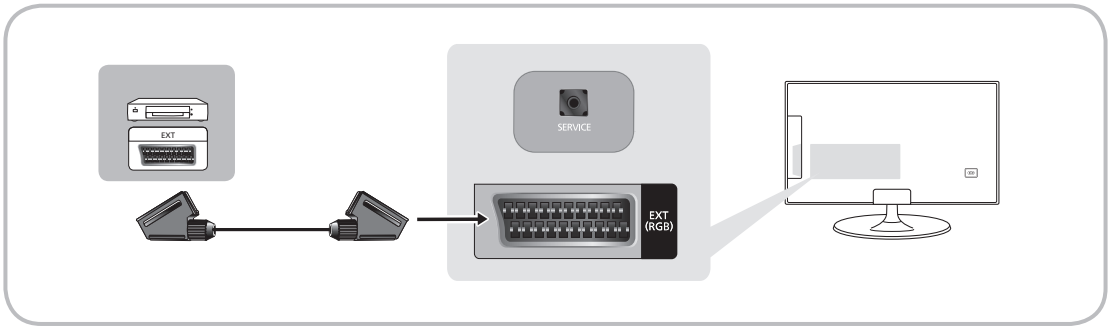


✎ For better picture quality, we recommend the Component connection over the A/V connection.

✎ When you connect a Video cable to **COMPONENT / AV IN**, the colour of the **COMPONENT / AV IN [VIDEO]** jack (green) will not match the video cable (yellow).

Using a Scart Cable

Available devices: DVD, VCR

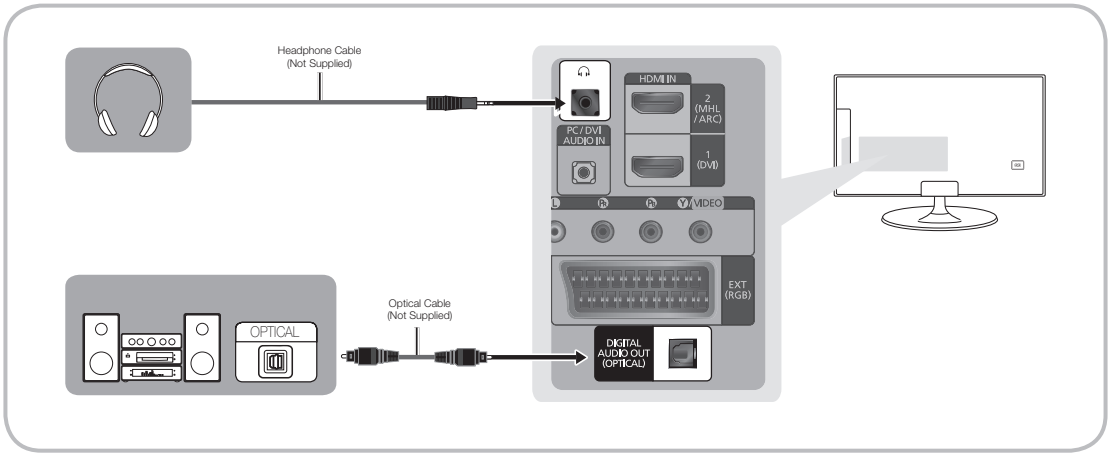


✎ In Ext. mode, DTV Out supports MPEG SD Video and Audio only.

Connecting to Audio Devices

Using an Optical (Digital) Cable and a Headphone Cable Connection

Use with Digital Audio Systems, Amplifiers, and Home Theatres.



✎ **Headphones** 🎧: You can connect your headphones to the headphone output jack on your product. While the headphones are connected, the sound from the built-in speakers will be disabled.

- The sound function may be restricted when you connect headphones to the product.
- Headphone volume and product volume are adjusted separately.
- The earphone jack supports only the 3 conductor tip-ring-sleeve (TRS) type.

✎ **DIGITAL AUDIO OUT (OPTICAL)**

- When you connect a Digital Audio System to the **DIGITAL AUDIO OUT (OPTICAL)** jack, decrease the volume of both the product and the system.
- 5.1 CH (channel) audio is available when you connect the product to an external device supporting 5.1 CH.
- When the receiver (home theatre) is set to on, you can hear sound output from the product's optical jack. When the product is receiving a DTV signal, the product will send 5.1 CH sound to the home theatre receiver. When the source is a digital component such as a DVD player / Blu-ray player / cable box / STB (Set-Top-Box) satellite receiver and you connected it to the product via HDMI, you will only hear 2 CH audio from the home theatre receiver. If you want to hear 5.1 CH audio, connect the digital audio out jack from your DVD / Blu-ray player / cable box / STB satellite receiver directly to an amplifier or home theatre.

Connections

The Service Cable Connection

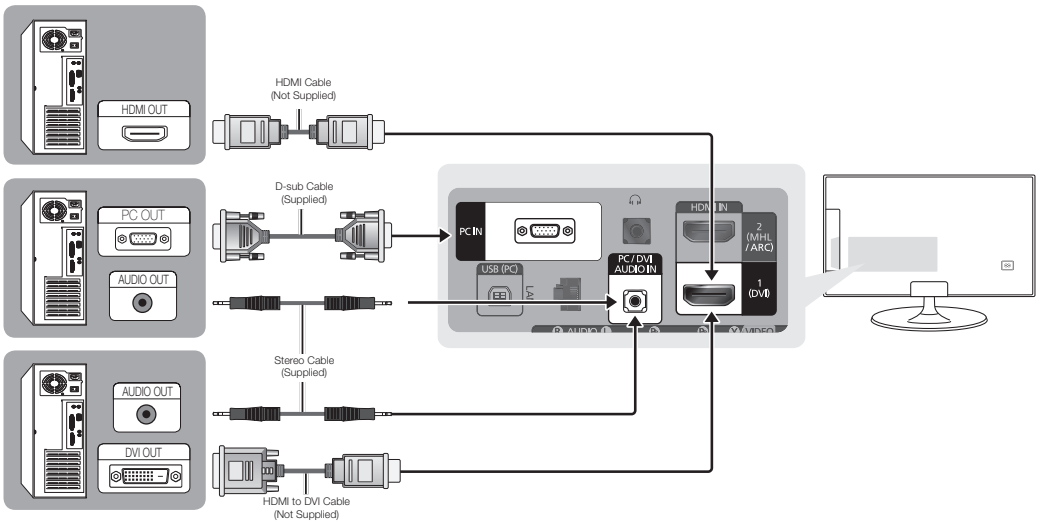
The **SERVICE** connection is for service only.

Connecting to a PC

Using an HDMI Cable or an HDMI to DVI Cable or a D-sub Cable Connection

✎ Your PC may not support an HDMI connection.

✎ Use your PC speakers for audio.



✎ **NOTE**

- For an HDMI to DVI cable connection, you must use the **HDMI IN 1 (DVI)** jack.
- For PCs with DVI video out jacks, use an HDMI to DVI cable to connect the DVI out on the PC to the **HDMI IN 1 (DVI)** jack on the product. Use the PC's speakers for audio.

Connections

Display Modes (HDMI/DVI Input)

The optimal PC display resolution for this product is 1920 x 1080 @ 60 Hz. We very strongly recommend you set the video output of your computer to the optimal resolution. You can also select one of the standard resolutions listed in the table below and the product will be automatically adjust to the resolution you choose. If you set your computer's video output to a resolution not listed in the table, the product screen may go blank and only the power indicator will turn on. To resolve this issue, adjust the resolution according to the following table, referring to the user guide for the graphics card.

Display Mode			Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H / V)
Mode	Resolution					
IBM	720 x 400	70Hz	31.469	70.087	28.322	-/+
VESA DMT	640 x 480	60Hz	31.469	59.940	25.175	-/-
MAC	640 x 480	67Hz	35.000	66.667	30.240	-/-
VESA DMT	640 x 480	72Hz	37.861	72.809	31.500	-/-
VESA DMT	640 x 480	75Hz	37.500	75.000	31.500	-/-
VESA DMT	800 x 600	60Hz	37.879	60.317	40.000	+/+
VESA DMT	800 x 600	72Hz	48.077	72.188	50.000	+/+
VESA DMT	800 x 600	75Hz	46.875	75.000	49.500	+/+
MAC	832 X 624	75Hz	49.726	74.551	57.284	-/-
VESA DMT	1024 x 768	60Hz	48.363	60.004	65.000	-/-
VESA DMT	1024 x 768	70Hz	56.476	70.069	75.000	-/-
VESA DMT	1024 x 768	75Hz	60.023	75.029	78.750	+/+
VESA DMT	1151 x 864	75Hz	67.500	75.000	108.000	+/+
MAC	1151 x 864	75Hz	68.681	75.062	100.000	-/+
VESA DMT	1280 x 720	60Hz	45.000	60.000	74.250	+/+
VESA DMT	1280 x 800	60Hz	49.702	59.810	83.500	-/+
VESA DMT	1280 x 1024	60Hz	63.981	60.020	108.000	+/+
VESA DMT	1280 x 1024	75Hz	79.976	75.025	135.000	+/+
VESA DMT	1366 x 768	60Hz	47.712	59.790	85.500	+/+
VESA DMT	1440 x 900	60Hz	55.935	59.887	106.500	-/+
VESA DMT	1600 x 900RB	60Hz	60.000	60.000	108.000	+/+
VESA DMT	1680 x 1050	60Hz	65.290	59.954	146.250	-/+
VESA DMT	1920 x 1080	60Hz	67.500	60.000	148.500	+/+

✎ For an HDMI to DVI cable connection, you must use the **HDMI IN 1 (DVI)** jack.

✎ The interlace mode is not supported.

✎ The set may operate abnormally if you select a non-standard video format.

✎ Separate and Composite modes are supported. SOG(Sync On Green) is not supported.

✎ If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

✎ DPM(Display Power Management) Function does not work if you used in connection with the HDMI port of this product.

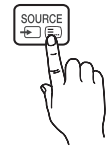
✎ If an HDMI to DVI cable is connected to the **HDMI IN 1 (DVI)** port, the audio does not work.

Changing the Input Source

Source

→ Source

When you are watching product and you want to watch a movie on your DVD player or Blu-ray player or switch to your cable box or STB satellite receiver, you need to change the Source.



TV / Ext. / PC / Intel® WiDi / HDMI1/DVI / HDMI2 / AV / Component

1. Press the button on your remote. The Smart Hub screen appears.
2. Select Source. The Source screen appears.
3. Select a desired external input source.

✎ Alternatively, you can access the Source screen by selecting the SOURCE button on your remote.

✎ You can only choose external devices that are connected to the product. In the displayed Source list, connected inputs are highlighted.

✎ In the Source, Ext., Intel® WiDi and PC are always stays activated.

What is Intel® WiDi?

With WiDi display technology, you can pair the product with your laptop computer wirelessly. This technology is based on the wireless LAN N series that is designed to transfer a high-quality signal of 720p or 1080p between wireless devices.

This is useful especially if you want to connect your desktop or laptop computer to a bigger screen such as a product.

- To implement the WiDi feature, your laptop computer must meet the requirements below.

  (For compatibility with your laptop computer, contact the manufacturer of your laptop computer.)

  ✎ System Requirements

  - Processor: Intel Core i3 Series
  - Graphics: Intel HD graphics
  - Wireless adapter
    - Intel® Centrino® Wireless-N 1000, 1030
    - Intel® Centrino® Advanced-N 6200, or 6230 6205
    - Intel® Centrino® Wireless-N + WiMAX 6150
    - Intel® Centrino® Advanced-N + WiMAX 6250
    - Intel® Centrino® Ultimate-N 6300
  - Software: Intel® My WiFi Technology (Intel® MWT) 2, Intel®wireless display are required to install
  - Operating system: Windows 7 32 bit, 64 bit

Connections

WiDi Connection

1. From the Source screen, select Intel® WiDi.
2. On your desktop, launch Intel ® WiDi ( ).

   ✎ As soon as the Programme starts, it searches for available adapters.
3. Select the correct adapter for the Programme and press "Connect".

   ✎ If the adapter of your choice is not found, press "Search for available adapters".

   ✎ If the search result has more than 2 match, check the product ID that you want to connect to.
4. Enter the security code into the WiDi Programme on your laptop computer. Note that the security code will only be displayed on the screen when first run.
5. A connection has been established with your laptop computer. Now you can use the WiDi feature to transfer data wirelessly.

Usage Conditions

- Frequency: 2.4G / 5G
- Effective Range: 0.5m ~ 3m (max. 10m) - required to minimize the electric interference
- Operation: Since the WiDi technology uses a compression codec system for communications purposes, you may encounter a delay in the transmission or a corrupt image on the screen. Therefore, it is advisable to use a wired port (HDMI or PC port, if any) to guarantee a stable, optimal performance.

Connections

How to Use Edit Name

Edit Name lets you associate a device name to an input source. To access Edit Name, open the Tools menu when the Source list is displayed. The following selections appear under Edit Name:

VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI Devices / TV / IPTV / Blu-ray / HD DVD / DMA: Select an input jack, and then select the name of the device connected to that jack from the list that appears. For example, if you have your Blu-ray player attached to **HDMI IN 2 (MHL / ARC)**, select Blu-ray for that input.

✎ If you connect a PC to the **HDMI IN 1 (DVI)** port with an HDMI cable, assign PC to HDMI1/DVI in Edit Name.

✎ If you connect a PC to the **HDMI IN 1 (DVI)** port with an HDMI to DVI cable, assign DVI PC to HDMI1/DVI in Edit Name.

✎ If you connect an AV device to the **HDMI IN 1 (DVI)** port with an HDMI to DVI cable, assign DVI Devices to HDMI1/DVI in Edit Name.

Information

You can see detailed information about the selected external device.

Refresh

If the external devices are not displayed in the Source list, open the Tools menu, and then select Refresh, and then search for the connected devices.

✎ Alternatively, you can refresh the Source list by selecting A using your remote.

Basic Features for the Monitor

Correct posture to use the product

Use the product in the correct posture as follows.

- Straighten your back.
- Allow a distance of 45 to 50cm between your eye and the screen, and look slightly downward at the screen. Keep your eyes directly in front of the screen.
- Adjust the angle so light does not reflect on the screen.
- Keep your forearms perpendicular to your upper arms and level with the back of your hands.
- Keep your elbows at about a right angle.
- Adjust the height of the product so you can keep your knees bent at 90 degrees or more, your heels attached to the floor, and your arms lower than your heart.

Changing the Preset Picture Mode

Picture Mode

Menu → Picture → Picture Mode

Picture modes apply preset adjustments to the picture.

- Standard

  Suitable for a normal environment.

- Entertain

  Sharpens the picture. Suitable for games.

Samsung MagicAngle

Menu → Picture → Samsung MagicAngle

MagicAngle lets you view optimal screen quality from almost any viewing position. By setting an appropriate value for each position, you can view a high quality picture, whether you are viewing the screen from an angle below, above, or on the side of the product.

- Samsung MagicAngle

  Select Lean Back Mode if viewing below the screen and Standing Mode if viewing above.

- Mode

  Determines the amount of adjustment. Numbers closer to 10 are best for lower viewing positions.

Backlight

Menu → Picture → Backlight

Adjusts the brightness of the screen by adjusting the brightness of the individual pixels.

Contrast

Menu → Picture → Contrast

Increases or decreases the contrast between dark and light areas of the picture.

Brightness

Menu → Picture → Brightness

Adjusts the brightness of the screen. Not as effective as Backlight.

Sharpness

Menu → Picture → Sharpness

Sharpens or dulls the edges of objects.

To adjust picture quality, follow these steps:

1. Select an option you want to adjust. When you select an option, a slider screen appears.
2. Adjust the option value using your remote.

✎ When you make change to option value, the OSD will be adjusted accordingly.

✎ You can adjust and store Settings for each external device connected to the product.

✎ Lowering picture brightness reduces power consumption.

Screen Adjustment

Menu → Picture → Screen Adjustment

Using this function, you can make change to various picture size and aspect ratio options.

- Picture Size

  If you have a cable box or satellite receiver, it may have its own set of screen sizes as well. However, we highly recommend you use your products 16:9 mode most of the time.

  16:9: Sets the picture to the 16:9 wide screen format.

  4:3: Sets the picture to basic (4:3) mode.

  ✎ Do not set your product to 4:3 format for a long time. The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Auto Adjustment

Menu → Picture → Auto Adjustment

Automatically adjusts the picture's frequency, position, and fine tune settings in the PC mode.

✎ Available only when you connect your PC to the product with a D-Sub cable.

PC Screen Adjustment

Menu → Picture → Screen Adjustment → PC Screen Adjustment

✎ Available in PC mode only.

- Coarse / Fine: Removes or reduces picture noise. If the noise is not removed by Fine-tuning alone, use the Coarse function to adjust the frequency as best as possible (Coarse) and Fine-tune again. After the noise has been reduced, re-adjust the picture so that it is aligned with the centre of screen.
- Position: Adjust the PC's screen position using your remote if it is not centered or does not fit the product screen.
- Image Reset: Resets the image to the default settings.

Using Your Product as a Computer (PC) Display

Entering the Video Settings (Based on Windows 7)

For your product to work properly as a computer display, you must enter the correct video settings.

✎ Depending on your version of Windows and your video card, the procedure on your PC will probably differ slightly from the procedure presented here.

✎ However, the same basic information will apply in most cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. Click “Control Panel” on the Windows start menu.
2. Click “Appearance and Themes” in the “Control Panel” window. A display dialog box appears.
3. Click “Display”. Another display dialog box appears.
4. Click the “Settings” tab on the display dialog box.
   - On the Settings tab, set the correct resolution (screen size). The optimal resolution for this product is 1920 x 1080.
   - If a vertical-frequency option exists on your display settings dialog box, select “60” or “60 Hz”. Otherwise, just click “OK” and exit the dialog box.

Advanced Settings

Menu → Picture → Advanced Settings

Using this function, you can configure advanced picture settings to create your preferred picture.

- White Balance

  Adjusts the Colour temperature of the picture so that white objects look white (instead of, for example, slightly pink or slightly yellow) and the overall Colour of the picture looks natural.

  R-Offset / G-Offset / B-Offset: Adjusts each Colour's (red, green, blue) darkness.

  R-Gain / G-Gain / B-Gain: Adjusts each Colour's (red, green, blue) brightness.

  Reset: Resets the White Balance to its default settings.

- Gamma

  Adjusts the primary Colour intensity.

  ✎ Available only when the Samsung MagicAngle is set to Off.

Picture Options

Menu → Picture → Picture Options

Using this function, you can configure additional picture settings to suit your preference.

- Colour Tone

  Cool makes the picture bluer (cooler). Warm1 and Warm2 make the picture redder (warmer).

  ✎ You can adjust and store settings for each external device connected to an input on the product.

- HDMI Black Level

  Lets you adjust the screen depth by selecting a black level.

  ✎ Available only in HDMI mode.

Reset Picture

Menu → Picture → Reset Picture

Resets your current picture mode to its default settings.

Sound Mode

Menu → Sound → Sound Mode

Sound modes apply preset adjustments to the sound.

✎ If Speaker Select is set to External Speaker, the Sound Mode is disabled.

- Standard

  Selects the normal sound mode.

- Music

  Emphasizes music over voices.

- Movie

  Provides the best sound for movies.

- Clear Voice

  Emphasizes voices over other sounds.

- Amplify

  Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

Sound Effect

Menu → Sound → Sound Effect

✎ If Speaker Select is set to External Speaker, the Sound Effect is disabled.

✎ Available only when the Sound Mode is set to Standard.

- SRS TruSurround HD

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

- SRS TruDialog

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- Equaliser

  The Equaliser displays a series of sliders. Use the arrow buttons to select a slider, and change the slider's value. To Reset the Equaliser, select the Reset. A pop-up appears asking if you want to reset, select Yes. To exit, select Close.

  Balance L/R: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the loudness of specific bandwidth frequencies.

  Reset: Resets the equalizer to its default settings.

SPDIF Output

Menu → Sound → Additional Settings → SPDIF Output

SPDIF (Sony Philips Digital Interface) provides digital audio output to speakers and various digital devices such as A/V Receivers and Home Theaters which reduces interference and distortion.

- Audio Format

  You can select the Digital Audio output (SPDIF) format. The available Digital Audio output (SPDIF) format may differ depending on the input source.

- Audio Delay

  Lets you correct timing mismatches between the audio track and the video when you are watching the product and listening to digital audio output from the product through an external device such as an AV receiver. When you select the Audio Delay, a slider screen appears. Adjust the option value using your remote (0ms ~ 250ms).

Speaker Settings

Menu → Sound → Speaker Settings

- Speaker Select

  If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the product's speakers and the speakers attached to your audio receiver. If this occurs, set the product to External Speaker.

  ✎ When the Speaker Select is set to External Speaker, the product's speakers are turned off. You will hear sound through the external speakers only. When the Speaker Select is set to TV Speaker, both the product's speakers and the external speakers are on. You will hear sound through both.

  ✎ When the Speaker Select is set to External Speaker, the volume buttons and mute function will not operate and the sound settings will be limited.

  ✎ If there is no video signal, both the product's speakers and the external speakers will be mute.

- Auto Volume

  Because each station has its own broadcasting conditions, the volume may fluctuate each time you change the channel. This feature automatically adjusts the volume of a channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

  ✎ To use the volume control of a connected source device, set Auto Volume to Off. A change to the volume control of the connected source device may not be applied if Auto Volume is set to Normal or Night.

Reset Sound

Menu → Sound → Reset Sound

Reset all sound settings to the factory defaults.

Using the INFO button (Now & Next guide)

The display identifies the current channel and the status of certain audio-video settings.

The Now & Next guide shows daily TV programme information for each channel according to the broadcasting time.

- Scroll ◀, ▶ to view information for a desired programme while watching the current channel.
- Scroll ▲, ▼ to view information for other channels. If you want to move to the currently selected channel, select ↵ using your remote.

Using the Channel Menu

Press the ⬡ button to select the menu you want to use. Each screen will be displayed.

Guide

⬡ → Guide

The EPG (Electronic Programme Guide) information is provided by broadcasters.

Using programme schedules provided by broadcasters, you can specify programmes you want to watch in advance so that the channel automatically changes to the selected programme channel at the specified time. Programme entries may appear blank or out of date depending on a channel status.

Using Channel View

A (Sche. Mgr): Displays the Schedule Manager.

B (-24 Hours): Viewing the list of programmes to be broadcasted before 24 hours.

C (+24 Hours): Viewing the list of programmes to be broadcasted after 24 hours.

D (Ch. Mode): Select the type of channels you want to display on the Channel View window.

i Information: Displays details of the selected programme.

◇ Page: Move to next or previous page.

↵ Watch / Schedule: When selecting the current programme, you can watch the selected programme. / When selecting the future programme, you can reserve to watch the selected programme.

Channel

⬡ → Channel

Using this function, you can add channels to or delete channels from the different Category channel lists on the Channel screen, set favourite channels, view and access recently viewed and mostly viewed channels, and edit the channel names of analog channels.

✎ The available items may differ depending on the selected aerial source.

- All

  Shows all channels.

- TV

  Shows product channels.

- Radio

Shows radio channels.

- Data/Other

  Shows data channels and other channels.

- Analogue

  Shows analogue channels.

- Favourites 1 – Favourites 5

  Shows all favourite channels, in up to five groups. Each group has separate channels.

  ✎ The product displays Favourites only if you have added favourites using Edit Favourites.

  ✎ If the Highlight located in the Favourites 1 – Favourites 5 category, you can change the name of category by selecting B using your remote.

- Recently Viewed

  Shows the most recently viewed channels.

- Most Viewed

  Shows the most frequently viewed channels.

Using the coloured and function buttons with the Channel

- When the highlight located in the category, you can use these options:
  - A Air / Cable

    Switches the mode and display between Air and Cable.

    ✎ Appears only if your product stored both Air and Cable.
  - ↩ Return

    Return to the previous menu.
- When the highlight located in the channel list, you can use these options:
  - A Air / Cable

    Switches the mode and display between Air and Cable.

    ✎ Appears only if your product stored both Air and Cable.
  - B Delete

    Delete the selected channel(s).
  - *i* Information

    Displays details of the selected channel.
  - ◇ Page

    Scrolls the channel list to the next or previous page.
  - Select / Deselect

    Select or deselect a channel.
  - Tools

    Displays the option menu.
  - ↩ Return

    Return to the previous menu.

Using the Tools menu with the Channel

- Edit Favourites

  Lets you assign channels you watch frequently to a favourite group and remove channels from a favourite group. You access Edit Favourites on the Tools menu.

- Lock / Unlock

  Lock a channel so that the channel cannot be selected and viewed.

  ✎ This function is available only when the Channel Lock is set to On.

- Rename channel

  (Appears only if you have selected an analogue channel.)

  Lets you assign a name of up to five characters to an analogue channel. For example, Food, Golf, etc. This makes it easier to find and select the channel.

- Edit Channel Number

  Edit the channel number by select the numbers.

  ✎ This function may not be supported depending on the region.

- Sorting (digital channels only)

  Change the list ordered by name or number.

- Channel Info

  Displays information of channel signal. The item may differ depending on channel.

- Search (when the aerial was set to Satellite)

  Channel scan is started.

- Delete

  Delete a channel to display the channels you want.

- Select All / Deselect All

  Select all channels in the list. / Deselect all channels you selected.

To delete a channel from a Category list on the Channel screen, follow these steps:

1. If you want to delete a channel, select a category of the channel.
2. Select a channel in the category list. A ✓ mark appears to the left of the channel.

✎ You can select more than one channel.

✎ If you select the selected channel again, a ✓ mark disappears.

3. Open the Tools menu using your remote.
4. Select Delete. The message Delete the selected channels? appears. Select OK.

✎ You can delete the selected channel immediately by selecting B using your remote.

✎ When you delete a channel in the Recently Viewed or Most Viewed category, the channel will disappear from the category list. But, the channel is not deleted.

To set channels as favourites, follow these steps:

1. Select the All category.
2. Select a channel in the category. A ✓ mark appears to the left of the channel.

✎ You can select more than one channel.

✎ If you select the selected channel again, a ✓ mark disappears.

3. Open the Tools menu using your remote.
4. Select the Edit Favourites. The Edit Favourites screen appears.
5. Select A using your remote. The selected channel will be moved to the favourite group.

✎ Also, you can select a channel in the Edit Favourites screen.

✎ You can add a favourite channel to any one of the groups. To change favourites group, select D using your remote. Each time you select D, a favourites group will be changed.

6. When done, select OK. The channel is made as a favourite and is assigned to the favourite group you selected.

✎ The product displays the "★" symbol next to the channel, indicating it is a favourite.

Using the coloured and function buttons with the Edit Favourites

- When the highlight located in the All, you can use these options:
  - A Add

    Add selected channels to the favourites group.
  - D Change favourites

    Change the favourites group. Each time you select D using your remote, a favourites group will be changed.
  - 0~9 Go To

    Move to the Highlight to a channel number immediately by pressing the number button using your remote.
  - Return

    Return to the previous menu.
- When the highlight located in the favourites group, you can use these options:
  - A Delete

    Delete the selected channel.
  - B Change order

    Change the favourites group list order.
  - Done

    Finish the Change order function.
  - C Copy

    Copy a selected channel to other favourites groups.
  - D Change favourites

    Change the favourites group. Each time you select D using your remote, a favourites group changes.
  - 0~9 Go To

    Move to the Highlight to a channel number immediately by pressing the number button using your remote.
  - Return

    Return to the previous menu.

To remove a channel from the list of favourites, follow these steps:

1. Select the favourites group category.
2. Select a channel in the selected favourites group. A ✓ mark appears to the left of the channel.

   ✎ You can select more than one channel.

   ✎ If you select the selected channel again, a ✓ mark disappears.
3. Open the Tools menu using your remote.
4. Select Delete. The message Do you want to delete the selected item(s)? appears.
5. Select OK. The message Deleted the selected item(s). appears.

✎ You can delete the selected channel from the list of favourites group immediately by selecting B using your remote.

- Rename channel

  (Appears only if you have selected an analog channel.)

  Lets you assign a name of up to five characters to an analog channel. For example, Food, Golf, etc. This makes it easier to find and select a channel.
- Select All / Deselect All

  Select all channels in the list. / Deselect all channels you selected.

Display Icons Used in the Channel screens

A: An analog channel.

: A favourite channel.

: A locked channel.

Schedule Manager

→ Schedule Manager

Using this function, you can set the product to display a desired channel automatically on a day and at a time of your choice.

✎ You must set the current time first using the Time → Clock function in System menu to use this function.

To use the Schedule Viewing, follow these steps:

1. On the Schedule Manager screen, select A using your remote. Select Schedule Viewing.
2. Set Aerial, Channel, Repeat, and Start Time.
   - Aerial

     You can view an aerial source. If your product has digital broadcasts, you can change a source from analog to digital.

     If you want to change an aerial source between Air and Cable, select an aerial source you want in Aerial menu (Channel → Aerial).
   - Channel

     Select the desired channel.

     ✎ You can only select memorized channels.
   - Repeat

     Select Once, Manual, Sat~Sun, Mon~Fri or Everyday. If you select Manual, you can set the day you want.

     ✎ The ✓ mark indicates a day you've selected.

     Date: You can set a desired date.

     ✎ The Date is available only when you select Once in Repeat.
   - Start Time

     You can set the start time you want.
3. When done, select OK. The selected channel is scheduled for viewing.

   ✎ On the Schedule Manager screen, you can check a list of Schedule Viewing.

To delete an item in a list of scheduled viewing, follow these step:

1. On the Schedule Manager screen, Highlight an item you want to delete.
2. Open the Tools menu using your remote.
3. Select Cancel schedule. The Cancel selected list(s)? message appears.
4. Select Yes. The selected schedule will be canceled.

To use the Schedule Recording, follow these steps:

(Digital channels only)

Allows you to make a reservation to record a programme scheduled for broadcast.

Set the current time first to use this function.

1. Select Schedule Manager. The Schedule Manager screen will be displayed.
2. Select A using your remote. A pop up screen will appear.
3. Select the Schedule Recording.
   - ✎ We recommend using a USB HDD with at least 5,400 rpm, but a USB HDD of RAID type is not supported.
   - ✎ More than 3TB USB HDD is not supported.
   - ✎ A USB storage device cannot record until it completes the Device Performance Test.
   - ✎ USB memory stick is not compatible.
4. Set the Aerial, Channel, Repeat, Date, Start / End Time.

Channel List

Using this function, you can view channel list, Programme information, favourite channel, and manage schedules of timer viewing.

1. Press the CH LIST button. The Channel List screen is displayed immediately.
2. Change a channel or channel list mode.

Using the coloured and function buttons with the Channel List

✎ If you press the INFO*i* button, the product displays details of the selected Programme.

- A Aerial

  Switches the mode and display between Air and Cable.

  ✎ Appears only if your product stored both Air and Cable.

- C Programme View / Channel View

  For digital channels, switches the display between Programme View and Channel View.

  When you select a digital channel in Channel List, select once to display a list of Programmes on that channel. select again to re-display the Channel View.

- ◀▶ Ch. Mode / Channel

  On Channel View screen, Toggles between the Favourites list. (if you have added favourites using Edit Favourites) / On Programme View screen, change a channel.

- Watch / Information

  Displays the channel you selected. / Displays details of the selected channel.

- ▲▼ Page

  Scrolls the Channel List to the next or previous page.

Basic Features for the TV

Display Icons Used in the Channel List screens

A: An analog channel.

: A reserved Programme.

: A locked channel.

Using the Schedule Viewing in Channel List (digital channels only)

You can use the Schedule Viewing in Channel List to schedule a digital channel Programme for viewing. The product will turn on and display the digital channel Programme when the Programme begins.

1. Press the CH LIST button. The Channel List screen appears.
2. Select a desired digital channel.
3. Select C using your remote. The product displays Programme list of the selected channel.
4. Select a desired Programme in the Programme list, and then select Information using your remote.
5. On the Information screen, select the Schedule Viewing. The selected Programme is set to Schedule Viewing.

   ✎ If you want to cancel the Schedule Viewing, follow Steps 1 through 4, and then select the Cancel schedule.

Aerial

Menu → Channel → Aerial

Before your product can memorize the available channels, you must select your Product signal source, Air (using an aerial) or Cable. Select Air or Cable. After you have selected the signal source, go on to the Auto Tuning function.

✎ Selecting the signal source using the Aerial function also determines the signal source the product is tuned to. For example, if you receive your product signal over the air, and you select Cable, you will see only snow. You must select Air to see a picture.

Country

Menu → Channel → Country

Select your country so that the product can correctly auto-tune the broadcasting channels.

✎ The PIN input screen appears. Enter your 4 digit PIN number.

- Digital Channel: Change the country for digital channels.
- Analogue Channel: Change the country for analogue channels.

Auto Tuning

Menu → Channel → Auto Tuning

Scans for a channel automatically and stores in the TV.

✎ Automatically allocated programme numbers may not correspond to actual or desired programme numbers. If a channel is locked using the Channel Lock function, the PIN input window appears.

- Auto Tuning

  Scans for channels automatically and stores them in the TV's memory.

- Cable Search Option (when the aerial was set to Cable) (Depending on the country)

  Sets additional search options such as the frequency and symbol rate for a cable network search.

- Digital & Analogue / Digital / Analogue

  Select the channel source to memorise. When selecting Cable → Digital & Analogue or Digital: Provide a value to scan for cable channels.

- Automatic Ordering (Depending on the country)

  Channels found will be automatically ordered following a criterion established by all the main national and local televisions.

  ✎ Available only when the aerial source is set to Air.

- Others Ordering (Depending on the country)

  If you select this menu you will find others channels ordering directly organized from private national televisions.

  ✎ Available only when the aerial source is set to Air.

- Operator Selection (Depending on the country)

  Selects a provider of cable services.

- Search Mode

  If you selected the Cable, the Search Mode screen appears.

  Scans for all channels with active broadcast stations and stores them in the TV.

  ✎ If you select Quick, you can set up the Network, Network ID, Frequency, Modulation, and Symbol Rate manually by the remote control.

  Network

  Selects the Network ID setting mode among Auto or Manual.

  Network ID

  When Network is Manual, you can set up Network ID.

  Frequency

  Displays the frequency for the channel. (Differs in each country)

  Modulation

  Displays available modulation values.

  Symbol Rate

  Displays available symbol rates.

Manual Tuning

Menu → Channel → Manual Tuning

Scans for a channel manually and stores in the TV.

✎ If a channel is locked using the Channel Lock function, the PIN input window appears.

✎ This function may not be supported depending on the region.

- Digital Channel Tuning

  Scans for a digital channel.

  1. Select the New.

     ✎ When selecting Aerial → Air

     Channel, Frequency, Bandwidth

     ✎ When selecting Aerial → Cable

     Frequency, Modulation, Symbol Rate

  2. Select the Search. When scanning has finished, a channel is updated in the channel list.

- Analogue Channel Tuning

  Scans for a analogue channel.

  1. Select the New.
  2. Set the Programme, Colour System, Sound System, Channel and Search.
  3. Select the Store. When scanning has finished, a channel is updated in the channel list.

  Channel mode

  - P (programme mode)

    When tuning is complete, the broadcasting stations in your area have been assigned to position numbers from P0 to P99. You can select a channel by entering the position number in this mode.

  - C (aerial channel mode) / S (cable channel mode)

    These two modes allow you to select a channel by entering the assigned number for each aerial broadcasting station or cable channel.

Guide Type

Menu → Channel → Guide Type

(Depending on the country)

You can select a different type of Guide.

- Samsung: Uses the guide programme by provided Samsung.
- Rovi On Screen: Uses the guide programme provided by Rovi International Solutions.

  ✎ ROVI EPG initial setting time can take a while depending on the region or broadcast environment.

Transfer Channel List

Menu → Channel → Transfer Channel List

Imports or exports the channel map. You should connect USB storage to use this function.

✎ The PIN input screen appears. Enter the PIN using your remote.

- Import from USB: Import channel list from USB.
- Export to USB: Export channel list to USB. This function is available when USB is connected.

Fine Tune

Menu → Channel → Fine Tune

(analog channels only)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually. Scroll to the left or right until the image is clear.

✎ Select the channel, and then select Fine Tune.

✎ Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.

✎ To reset fine-tuning, select the channel, select Fine Tune, and then select Reset on the Fine Tune screen.

Crosstalk noise reduction

Menu → Channel → Crosstalk noise reduction

(Depending on the country) (Analogue channels only)

This function reduces diagonal noise in the picture caused by signal crosstalk (interference). If your TV picture displays diagonal noise or distortion when you watch, turn on this function.

Picture Mode

Menu → Picture → Picture Mode

Picture modes apply preset adjustments to the picture.

- Dynamic

  Brightens the screen. Suitable for a bright room.

- Standard

  Suitable for a normal environment.

- Natural

  Suitable for reducing eye strain.

- Movie

  Darkens the screen, making it less glary. Suitable for watching movies in a darkened room.

Samsung MagicAngle

Menu → Picture → Samsung MagicAngle

MagicAngle lets you view optimal screen quality from almost any viewing position. By setting an appropriate value for each position, you can view a high quality picture, whether you are viewing the screen from an angle below, above, or on the side of the product.

- Samsung MagicAngle

  Select Lean Back Mode if viewing below the screen and Standing Mode if viewing above.

- Mode

  Determines the amount of adjustment. Numbers closer to 10 are best for lower viewing positions.

Backlight

Menu → Picture → Backlight

Adjusts the brightness of the screen by adjusting the brightness of the individual pixels.

Contrast

Menu → Picture → Contrast

Increases or decreases the contrast between dark and light areas of the picture.

Brightness

Menu → Picture → Brightness

Adjusts the brightness of the screen. Not as effective as Backlight.

Sharpness

Menu → Picture → Sharpness

Sharpens or dulls the edges of objects.

Colour

Menu → Picture → Colour

Adjusts the colour saturation. The higher the Colour setting, the more intense the colour. Low settings remove colour and the picture becomes black, white and gray.

Tint (G/R)

Menu → Picture → Tint (G/R)

Adjusts the amount of green and red in the picture. As you increase the amount of green, the amount of red decreases and vice versa.

To adjust picture quality, follow these steps:

1. Select an option you want to adjust. When you select an option, a slider screen appears.
2. Adjust the option value using your remote.

✎ When you make change to option value, the OSD will be adjusted accordingly.

✎ You can adjust and store Settings for each external device connected to the product.

✎ Lowering picture brightness reduces power consumption.

Screen Adjustment

Menu → Picture → Screen Adjustment

Using this function, you can make change to various picture size and aspect ratio options.

- Picture Size

  Your cable box / satellite receiver may have its own set of screen sizes as well. However, we highly recommend you use 16:9 mode most of the time.

  Auto Wide: Automatically adjusts the picture size to the 16:9 aspect ratios.

  16:9: Adjusts the picture size to 16:9 for DVDs or wide broadcasting.

  Wide Zoom: Magnifies the picture size more than 4:3.

  Zoom: Magnifies the 16:9 wide pictures vertically to fit the screen size.

  4:3: The default setting for a movie or normal broadcasting.

  ✎ Do not watch in 4:3 format for a long time. Traces of borders displayed on the left, right and centre of the screen may cause image retention (screen burn) which is not covered by the warranty.

  Screen Fit: Displays the full image without any cut-off when HDMI (720p / 1080i / 1080p), DTV (1080i, 1080p) or Component (1080i / 1080p) signals are inputted.

  The picture size can vary when you play content from Videos in AllShare Play.

- Zoom/position

  Adjusts the picture zoom and position. Zoom is only available if Picture Size is set to Zoom. Position is only available if Picture Size is set to Wide Zoom, Zoom, or Screen Fit.

To use the Zoom function after selecting Zoom, follow these steps:

1. Select Zoom.
2. On the Zoom/position screen, select Zoom, and then zoom in or zoom out using your remote.
3. When done, select Zoom again, and then select Close.
4. To reset the picture, press Reset.

To use the Position function after selecting Wide Zoom, Zoom or Screen Fit, follow these steps:

1. Select the Position.
2. On the Position screen, select Position, and then move the picture to position you want using your remote.
3. When done, select Position again, and then select Close.
4. To reset the picture position, select Reset.

Picture Sizes available by Input Source:

- ATV, EXT, AV: Auto Wide, 16:9, Wide Zoom, Zoom, 4:3
- DTV (576i/p, 720p): Auto Wide, 16:9, Wide Zoom, Zoom, 4:3
- DTV (1080i, 1080p): Auto Wide, 16:9, Wide Zoom, Zoom, 4:3, Screen Fit
- Component (480i/p, 576i/p, 720p): 16:9, Wide Zoom, Zoom, 4:3
- Component (1080i, 1080p): 16:9, Wide Zoom, Zoom, 4:3, Screen Fit
- HDMI (480i/p, 576i/p): 16:9, Wide Zoom, Zoom, 4:3
- HDMI (720p, 1080i, 1080p): 16:9, Wide Zoom, Zoom, 4:3, Screen Fit

✎ Depending on the input source, the picture size options may vary.

✎ The available items may differ depending on the selected mode.

✎ HD (High Definition): 16:9 - 1080i/1080p (1920x1080), 720p (1280x720)

✎ You can adjust and store settings for each external device you have connected to an input on the product.

- 4:3 Screen Size

  Available only when picture size is set to Auto Wide. You can determine the desired picture size at the 4:3 WSS (Wide Screen Service) size or the original size. Each European country requires different picture size.

  ✎ Not available in Component or HDMI mode.

Advanced Settings

Menu → Picture → Advanced Settings

Using this function, you can configure advanced picture settings to create your preferred picture.

✎ Advanced Settings is available only when the Picture Mode is set to Standard or Movie mode.

- Dynamic Contrast

  Adjusts the screen contrast.

- Black Tone

  Darker settings make blacks look darker.

- Flesh Tone

  Adjusts the amount of red in skin tones.

- RGB Only Mode

  Displays the Red, Green and Blue colours so you can make fine adjustments to hue and saturation.

- Colour Space

  Adjusts the range and variety of colours (the colour space) available to create images.

  ✎ To adjust Colour, Red, Green, Blue and Reset, set the Colour Space to Custom.

- White Balance

  Adjusts the colour temperature of the picture so that white objects look white (instead of, for example, slightly pink or slightly yellow) and the overall colour of the picture looks natural.

  R-Offset / G-Offset / B-Offset: Adjusts each colour's (red, green, blue) darkness.

  R-Gain / G-Gain / B-Gain: Adjusts each colour's (red, green, blue) brightness.

  Reset: Resets the White Balance to it's default settings.

- 10p White Balance

  Controls the white balance in 10 point intervals by adjusting the red, green, and blue brightness.

  ✎ Available when the Picture Mode is set to Movie and when the Samsung MagicAngle is set to Off.

  ✎ Some external devices may not support this function.

- Gamma

  Adjusts the primary colour intensity.

  ✎ Available only when the Samsung MagicAngle is set to Off.

- Expert Pattern

  Use the Expert Pattern function to calibrate the picture. If the OSD menu disappears or a menu other than the Picture menu is opened, the product saves the calibration and the Expert Pattern screen disappears.

  Off: Turns the Expert Pattern function off.

  Pattern1: This test screen demonstrates the effect of the display settings on shades of grey and black.

  Pattern2: This test screen demonstrates the effect of the display settings on colours.

  ✎ After selecting Pattern1 or Pattern2, you can adjust any of the advanced settings for desired effect.

  ✎ While the Expert Pattern is running, the product does not output sound.

  ✎ Available only when the Picture Mode is set to Movie or Standard in DTV(over 720p), Component, and HDMI modes.

- Motion Lighting

  Adjust brightness levels according to on-screen picture motion to reduce power consumption.

  ✎ Only available in Standard mode.

  ✎ When you change the Backlight, Contrast or Brightness, the product sets the Motion Lighting to Off.

Picture Options

Menu → Picture → Picture Options

Using this function, you can configure additional picture settings to suit your preference.

✎ When your product is connected to a PC, you can only make changes to Colour Tone.

- Colour Tone

  Cool makes the picture bluer (cooler). Warm1 and Warm2 make the picture redder (warmer).

  ✎ Warm1 and Warm2 are deactivated when the Picture Mode is set to Dynamic.

  ✎ You can adjust and store settings for each external device connected to an input on the product.

- Digital Noise Filter

  If the broadcast signal received by your product is weak, you can activate the Digital Noise Filter feature to reduce any static and ghosting that may appear on the screen.

  Auto Visualisation: When changing analog channels, displays signal strength.

  ✎ When the signal is weak, try all the options until the product displays the best picture.

  ✎ Only available for analog channels.

  ✎ When the bar is green, you are receiving the best possible signal.

- MPEG Noise Filter

  Reduces MPEG noise to provide improved picture quality.

- HDMI Black Level

  Lets you adjust the screen depth by selecting a black level.

  ✎ Available only in HDMI mode.

- Film Mode

  Sets the product so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.

  ✎ Available in TV, AV, Component (480i / 1080i) and HDMI (1080i).

Reset Picture

Menu → Picture → Reset Picture

Resets your current picture mode to its default settings.

Sound Mode

Menu → Sound → Sound Mode

Sound modes apply preset adjustments to the sound.

✎ If Speaker Select is set to External Speaker, the Sound Mode is disabled.

- Standard

  Selects the normal sound mode.

- Music

  Emphasizes music over voices.

- Movie

  Provides the best sound for movies.

- Clear Voice

  Emphasizes voices over other sounds.

- Amplify

  Increase the intensity of high-frequency sound to allow a better listening experience for the hearing impaired.

Sound Effect

Menu → Sound → Sound Effect

✎ If Speaker Select is set to External Speaker, the Sound Effect is disabled.

✎ Available only when the Sound Mode is set to Standard.

- SRS TruSurround HD

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers using HRTF (Head Related Transfer Function) technology.

- SRS TruDialog

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- Equaliser

  The Equaliser displays a series of sliders. Use the arrow buttons to select a slider, and change the slider's value. To Reset the Equaliser, select the Reset. A pop-up appears asking if you want to reset, select Yes. To exit, select Close.

  Balance L/R: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the loudness of specific bandwidth frequencies.

  Reset: Resets the equalizer to its default settings.

Broadcast Audio Options

Menu → Sound → Broadcast Audio Options

- Audio Language

  (Digital channels only)

  Change the default value for audio languages.

  ✎ The available language may differ depending on the broadcast.

- Audio Format

  (Digital channels only)

  When sound is emitted from both the main speaker and the audio receiver, a sound echo may occur due to the decoding speed difference between the main speaker and the audio receiver. In this case, use the product Speaker function.

  ✎ Audio Format option may differ depending on the broadcast. 5.1ch Dolby digital sound is only available when connecting an external speaker through an optical cable.

- Audio Description

  (Not available in all locations) (Digital channels only)

  This function handles the Audio Stream for the AD (Audio Description) which is sent along with the Main audio from the broadcaster.

  ✎ Audio Description (Off / On): Turn the audio description function on or off.

  ✎ Volume: Adjust the audio description volume.

Additional Settings

Menu → Sound → Additional Settings

- DTV Audio Level

  (Digital channels only)

  This function allows you to reduce the disparity of a voice signal (which is one of the signals received during a digital TV broadcast) to a desired level.

  ✎ According to the type of broadcast signal, MPEG / HE-AAC can be adjusted between -10dB and 0dB.

  ✎ To increase or decrease the volume, adjust between the range 0 and -10 respectively.

- SPDIF Output

  SPDIF (Sony Philips Digital InterFace) is used to provide digital sound, reducing interference going to speakers and various digital devices such as a DVD player.

- Audio Format: You can select the Digital Audio output (SPDIF) format.

  ✎ The available Digital Audio output (SPDIF) format may differ depending on the input source.

- Audio Delay

  Lets you correct timing mismatches between the audio track and the video when you are watching the product and listening to digital audio output from the product through an external device such as an AV receiver. When you select the Audio Delay function, a slider screen appears. Adjust the option value using your remote (0ms ~ 250ms).

- Dolby Digital Comp

  This function minimizes signal disparity between a dolby digital signal and a voice signal (i.e. MPEG Audio, HE-AAC, ATV Sound).

  ✎ Select Line to obtain dynamic sound, and RF to reduce the difference between loud and soft sounds at night time.

  Line: Set the output level for signals greater or less than -31dB (reference) to either -20dB or -31dB.

  RF: Set the output level for signals greater or less than -20dB (reference) to either -10dB or -20dB.

Speaker Settings

Menu → Sound → Speaker Settings

- Speaker Select

  If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the product's speakers and the speakers attached to your audio receiver. If this occurs, set the product to External Speaker.

  ✎ When the Speaker Select is set to External Speaker, the product's speakers are turned off. You will hear sound through the external speakers only. When the Speaker Select is set to TV Speaker, both the product's speakers and the external speakers are on. You will hear sound through both.

  ✎ When the Speaker Select is set to External Speaker, the volume buttons and mute function will not operate and the sound settings will be limited.

  ✎ If there is no video signal, both the product's speakers and the external speakers will be mute.

- Auto Volume

  Because each station has its own broadcasting conditions, the volume may fluctuate each time you change the channel. This feature automatically adjusts the volume of a channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

  ✎ To use the volume control of a connected source device, set Auto Volume to Off. A change to the volume control of the connected source device may not be applied if Auto Volume is set to Normal or Night.

Reset Sound

Menu → Sound → Reset Sound

Reset all sound settings to the factory defaults.

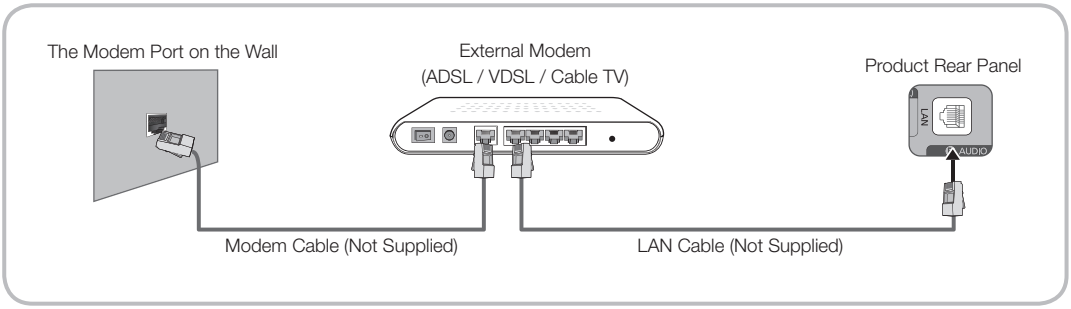
Network Features

Connecting to the Network

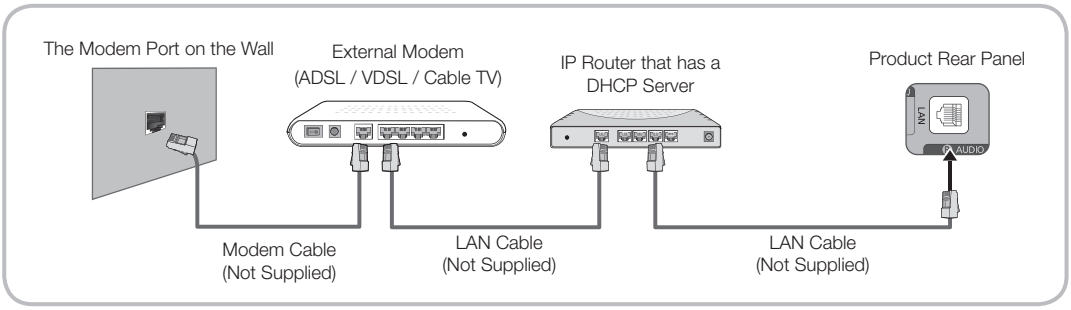
The Wired Network Connection

There are three main ways to connect your product to your network using cable, depending on your network setup. They are illustrated below:

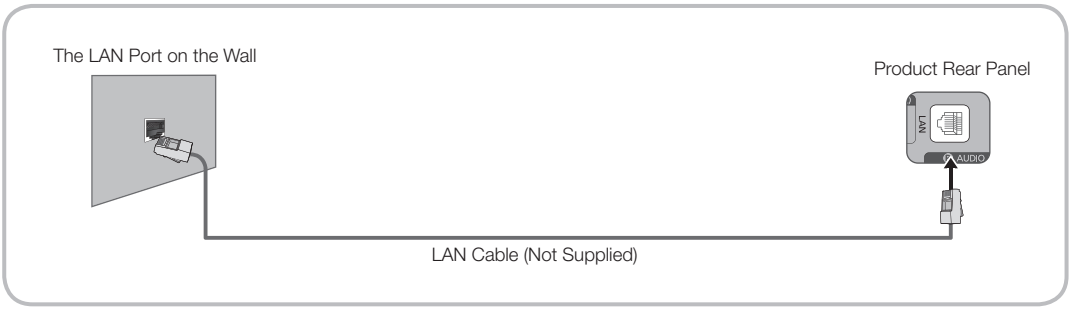
– You can attach your product to your LAN by connecting the LAN port on the back of your product to an external modem using a LAN cable.



– You can attach your product to your LAN by connecting the LAN port on the back of your product to an IP Sharer which is connected to an external modem. Use LAN cable for the connection.



– Depending on how your network is configured, you may be able to attach your product to your LAN by connecting the LAN port on the back of your product directly to a network wall outlet using a LAN cable.Note that the wall outlet is attached to a modem or router elsewhere in your house.



✎ Use Cat 5 or 6 (*STP Type) cable for the connection. (*Shielded Twist Pair)

✎ It is not supported when the network speed is below or equal to 10Mbps.

Network Features

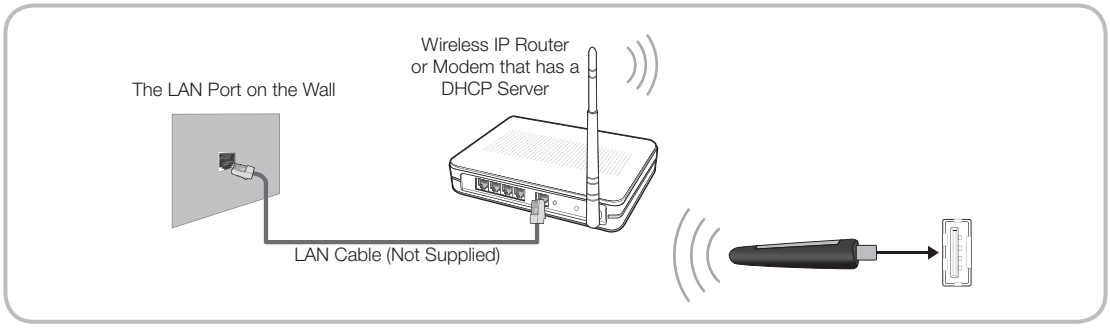
✎ If your network requires a Dynamic IP address, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your product needs to access the Internet so you do not have to enter them manually. Most home networks use a Dynamic IP address.

✎ Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values contact your Internet Service Provider (ISP). If you have a Windows computer, you can also get these values through your computer.

✎ You can use ADSL modems that support DHCP if your network requires a Static IP address. ADSL modems that support DHCP also let you use Static IP addresses.

The Wireless Network Connection

You can connect your product to your LAN through a standard wireless router or modem. To connect wirelessly, you must first attach a “Samsung Wireless LAN Adapter” (WIS09ABGNX or WIS12ABGNX - sold seperately) to either the USB port on your product. See the illustration below.



Samsung’s Wireless LAN adapter is sold separately and is offered by select retailers, Ecommerce sites and Samsungparts.com. Samsung’s Wireless LAN adapter supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not play smoothly.

Most wireless network systems incorporate a security system that requires devices that access the network through an access point or AP (typically a wireless IP Sharer - router or modem) to transmit an encrypted security code called an access key.

Network Features

Your product supports only the following wireless network security protocols:

- Authentication Mode : WEP, WPAPSK, WPA2PSK
- Encryption Type : WEP, TKIP, AES

✎ To use a wireless network, your product must be connected to a wireless IP sharer (either a router or a modem). If the wireless IP sharer supports DHCP, your product can use a DHCP or static IP address to connect to the wireless network.

✎ Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.

✎ If you select the Pure High-throughput (Greenfield) 802.11n mode and the Encryption type is set to WEP or TKIP on your AP or wireless router, Samsung products will not support a connection in compliance with new Wi-Fi certification specifications.

✎ If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.

✎ If your router, modem, or device is not certified, it may not connect to the product.

✎ Connection Methods: You can set up the wireless network connection in three ways:

- Using Auto Setup (with the Auto Network Search function)
- Using Manual Setup
- Using WPS(PBC)

Network Settings

Menu → Network → Network Settings

Set the wired or wireless network connection to use various Internet services such as Smart Hub, AllShare Play and perform software upgrades.

Automatic Wired Network Setup

You can configure your product's wired network connection automatically when connecting your product to a network that supports DHCP.

✎ When connecting LAN cable, the screen pop-up appears directly to set wired network.

To set up your product's wired network connection automatically, follow these steps:

1. Go to the Network Settings screen. (Menu → Network → Network Settings)
2. Select Start. The network test screen appears and verifies the network connection.
3. When the connection has been verified, the You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider. message appears. Select OK.

✎ If the connection process fails, check the LAN port connection.

✎ If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section, "Manual Network Setup."

Network Features

Manual Wired Network Setup

You can configure your product's wired network connection manually when connecting your product to a network that requires a Static IP address.

Getting the Network Connection Values

To view the Network connection values on Windows XP computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

To set up your product's wired network connection manually, follow these steps:

1. Go to the Network Settings screen. (Menu → Network → Network Settings)
2. Select Start. The network connection screen appears and the verification process starts.
3. Select Stop. The verification process stops. Select IP Settings on network connection screen. The IP Settings screen appears.
4. Select the IP Mode, and then set the IP Mode to Manual.
5. Go to the IP Address entry field, and then select the IP Address using remote.
6. Enter the first portion of the IP Address (for example, 105) into the first entry field using your remote. When done, go to the next field.
7. Enter the next portion of the IP Address. When done, go to the next field.
8. Repeat the entry process for each field in the IP Address.

   ✎ If you make a mistake when entering a number, re-enter the number to correct it.
9. When done, go to the Subnet Mask fields.
10. Repeat the same entry process for Subnet Mask, Gateway, and DNS Server.
11. When done, select OK. The network test screen appears and the verification process starts. When the connection has been verified, the You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider. message appears.

Network Features

Network Status

Menu → Network → Network Status

You can check the current network and Internet status.

If the wired network connection failed...

- **No network cable found.**

  Check if your network cable is plugged in. If it is connected, make sure that the router is turned on. If it is on, try turning if off and on again.

- **IP auto setting failed.**

  Try the following to set your IP address automatically or set your IP address manually by selecting PIP Settings.

  1) Ensure that DHCP server is enabled on the router.

  2) Unplug and re-plug-in the router.

  3) Contact your Internet Service Provider for more information.

- **Unable to connect to the network.**

  Try the following: check if your IP address is set correctly in IP Settings. Contact your Internet Service Provider for more information.

- **Connected to your local network, but cannot connect to the Internet.**

  Check the DNS settings in IP Settings or contact your Internet Service Provider to access the Internet.

- **Network setup complete, but cannot connect to the Internet.**

  Contact your Internet Service Provider to access the Internet.

Network Settings

Menu → Network → Network Settings

Set the wired or wireless network connection to use various Internet services such as Smart Hub, AllShare Play and perform software upgrades.

Automatic Wireless Network Setup

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up security for your wireless network.

If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the automatic or manual setup process.

✎ Depending on your router or modem, you may be able to use a WPS PIN instead.

To set up your product's wireless network connection automatically, follow these steps:

1. Go to the Network Settings screen. (Menu → Network → Network Settings)
2. Select Start. The network function searches for available wireless networks. When done, it displays a list of the available networks.
3. In the list of networks, select a network you want to connect to, and then select Next.

   ✎ If the wireless router is set to Hidden (Invisible), you have to select Add Network and enter the correct Network Name (SSID) and Security Key to establish the connection.
4. If the Enter security key screen appears, go to step 5. If you selected a wireless router that does not have security, go to step 7.
5. If the router has security, enter the Security Key (Security key or PIN).

   ✎ When you enter the Security Key (Security key or PIN).

   ✎ You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.
6. When done, select Next. The network connection screen appears and the verification process starts.
7. When the connection has been verified, the "You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider." message appears.

✎ If the network does not accept the Security Key or PIN, select Retry or select IP Settings to enter the settings manually.

✎ If you want to set up the connection manually, select IP Settings. Then, go to the next section, "Manual Network Setup".

Network Features

Manual Wireless Network Setup

You can configure your product's wireless network connection manually when connecting your product to a network that requires a Static IP address or if the automatic connection process has failed.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

To set up your product's wireless network connection manually, follow these steps:

1. Go to the Network Settings screen. (Menu → Network → Network Settings)
2. Select Start. The network function searches for available wireless networks. When done, it displays a list of the available networks.
3. In the list of networks, select a network you want to connect to, and then select Next.

   ✎ If the wireless router is set to Hidden (Invisible), you have to select Add Network and enter the correct Network Name (SSID) and Security Key to establish the connection.
4. If the Enter security key screen appears, go to step 5. If you selected a wireless router that does not have security, go to step 7.
5. Enter the Security Key (Security key or PIN).

   ✎ Enter the security key, using a keyboard screen.

   ✎ You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.
6. When done, select Next. The network connection screen appears and the verification process starts.
7. Select Stop. The verification process stops. Select IP Settings on the network connection screen. The IP Settings screen appears.
8. Select IP Mode, and then set the IP Mode to Manual.
9. Go to the IP Address entry field, and then select the IP Address using the remote.
10. Enter the first portion of the IP Address (for example, 105) into the first entry field using your remote. When done, go to the next field.
11. Enter the next portion of the IP Address. When done, go to the next field.
12. Repeat the entry process for each field in the IP Address.

    ✎ If you make a mistake when entering a number, re-enter the number to correct it.
13. When done, go to the Subnet Mask fields.
14. Repeat the same entry process for Subnet Mask, Gateway, and DNS Server.
15. When done, select OK. The network connection screen appears and the verification process starts. When the connection has been verified, the "You are connected to the Internet. If you have any problems using online services, please contact your Internet service provider." message appears.

Network Features

WPS(PBC) Network Setup

If your router has a WPS(PBC) button, you can configure your product's wireless network connection using the WPS(PBC) button more easily.

To set up your product's wireless network connection using WPS(PBC), follow these steps:

1. Go to Network Settings screen. (Menu → Network → Network Settings)
2. Select Start. The network function searches for available wireless networks. When done, it displays a list of the available networks.
3. Select the WPS(PBC).
4. Press the WPS(PBC) button on your router within 2 minutes. Your product automatically acquires all the network setting values it needs and connects to your network.
5. The network connection screen appears, and network setup is done.

Network Features

Network Status

Menu → Network → Network Status

You can check the current network and Internet status.

When the wireless network connection failed

- **Wireless network connection failed.**

  No wireless router selected. Go to Network Settings to select your router.

- **Unable to connect to wireless router.**

  Try the following: check if the router is turned on, and if it is, try turning it off and on again. Check if you need to enter a security key to use the router.

- **IP auto setting failed.**

  Try the following to set your IP address automatically or set your IP address manually by selecting 'IP Settings'.

  1) Ensure that DHCP server is enabled on the router.

  2) Unplug and re-plug-in the router.

  3) Contact your Internet Service Provider for more information.

- **Unable to connect to the network.**

  Try the following: check if your IP address is set correctly in IP Settings. Contact your Internet Service Provider for more information.

- **Connected to your local network, but cannot connect to the Internet.**

  Check the DNS settings in IP Settings, or contact your Internet Service Provider to access the Internet.

- **Network setup complete, but cannot connect to the Internet.**

  Contact your Internet Service Provider to access the Internet.

Wi-Fi Direct

Menu → Network → Wi-Fi Direct

Set to connect the product to wireless mobile devices. Using this function, you can connect wireless mobile devices to your product directly without a router.

✎ To use this function, your mobile device should be supported by the Wi-Fi Direct.

To connect your mobile device with your product using Wi-Fi Direct, follow these steps:

1. Go to the Wi-Fi Direct screen (Network → Wi-Fi Direct). The product starts to search devices, and then displays the devices on the Wi-Fi Direct screen.
2. Turn on the Wi-Fi Direct function on your device. Select the desired Wi-Fi device.
   - For PBC: Press the WPS(PBC) button on your Wi-Fi device within 2 minutes. The Connecting popup appears, followed by the Connected pop-up. When it closes, you should see the device listed on the Wi-Fi Direct screen as connected.
   - PIN: Input the displayed PIN on your device.

✎ If you want to disconnect the device, select the connected Wi-Fi device, and then select Disconnect. The Connecting popup appears, followed by the Connected pop-up. When it closes, you should see the device listed on the Wi-Fi Direct screen as connected.

✎ The product and BD products perform the role of the Group Owner. If a product or BD is connected via Wi-Fi Direct, the connected device is represented as a Group Owner in the Wi-Fi Direct list. However, even in this case, the product cannot connect to another product or BD through Wi-Fi Direct.

Network Features

Soft AP

Menu → Network → Soft AP

Using this function, you can connect the product to your mobile devices if your mobile device does not support Wi-Fi Direct.

The Soft AP screen lets you set the options for connecting Wi-Fi devices.

- Soft AP

  Turns Soft AP on or off. When Soft AP is set to On, your mobile devices can find the product's network name in their Wi- Fi connection list.

- Security Key

  Enter a Security Key at least 8 characters long using the remote control. Select Done when finished.

  – If the security key is not at least 8 characters long, Done is not available.

  – To connect a mobile device to the product, you must input the security key into the device.

  – If network does not operate correctly, check the security key again. An incorrect security key may cause a malfunction.

Using Wi-Fi Direct or Soft AP, you can share data through AllShare Play.

(For only some of the mobile device models among the mobile device models supporting Wi-Fi Direct or Soft AP.)

	Wi-Fi Direct	Soft AP
Number of Wi-Fi devices that can be connected	Up to 5	Up to 5
Data sharing	Supported through AllShare (only for supported mobile device models.)	Only through AllShare

Network Features

AllShare Settings

Menu → Network → AllShare Settings

Selects whether to use media functions on the network. For details on set up options, refer to the “AllShare Settings” in the AllShare Play section.

Device Name

Menu → Network → Device Name

Enter a name for this product. This name will be shown on network remote controls and devices using AllShare Play.

✎ A keyboard appears on the screen. Key in a name for your product manually using your remote control. For example, if you want to change the name to Samsung Monitor, select each character using your remote. When done, select Done.

Time

Menu → System → Time

✎ The time you set will appear when you press the INFO*i* button.

- Clock

  Set the clock to use the various timer features of the product.

  ✎ If you disconnect the power cord, you have to set the clock again.

  Clock Mode: Set the current time manually or automatically.

  – Auto: The product sets the current time automatically using the time from a digital channel.

    ✎ You must have the cable or an aerial connected to the product to set the time automatically.

    ✎ Depending on the broadcast station and signal, the auto time set up may not be correct. In this case, set the time manually.

  – Manual: Set the current time manually.

  Clock Set: Set the Date and Time manually. You can set the current date and time using your remote.

  ✎ Available only when the Clock Mode is set to Manual.

  Time Zone: Select your time zone.

  ✎ This function is only available when the Clock Mode is set to Auto.

  GMT: Selects your time zone.

  ✎ When Country is set to Others, you can use this function.

  DST: Switches the DST (Daylight Saving Time) function on or off.

  ✎ This function is only available when the Clock Mode is set to Auto.

- Sleep Timer

  Automatically shuts off the product after a preset period of time. (30, 60, 90, 120, 150, or 180 minutes).

  ✎ Select a period of time using your remote. To cancel the Sleep Timer, select Off.

Preference Features

- On Timer

  Set On Timer so that your product turns on automatically at a time and on a day of your choosing. You can set up three separate On Timer configurations. (On Timer 1, On Timer 2, On Timer 3) and select the source of the content the product plays when it turns on: an air or cable channel, a USB device, or a set-top box connected to one of the product's inputs (HDMI1, AV, etc.).

  ✎ You must set the clock before you can use the On Timer function.

  Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want On Timer to turn on your product.

  ✎ The ✓ mark indicates days you've selected.

  Time: Set the time that the product turns on automatically.

  Volume: Set the desired volume level.Change the volume level using your remote.

  Source: To select what will be turned on when the timer setting is activated. You can set the product to turn on a specific channel or play back contents such as video, photo or audio files located in an external device connected to the product.

  ✎ The USB device must be connected to your product before you can select USB.

  Aerial (when the Source is set to TV): Select ATV or DTV.

  Channel (when the Source is set to TV): Select the desired channel.

  Music / Photo (when the Source is set to USB): Select a folder in the USB device containing music or photo files you want played when the product turns on automatically.

  ✎ If there is no music file on the USB device or you don't select a folder containing a music file, the Timer function does not operate correctly.

  ✎ If there is only one photo file in the USB, the slide show will not play.

  ✎ If a folder name is too long, the folder cannot be selected.

  ✎ Each USB you use is assigned its own folder. When using more than one of the same types of USB, make sure the folders assigned to each USB have different names.

  ✎ We recommend that you use a USB memory stick and a multi card reader when using the On Timer. The On Timer function may not work with USB devices that have a built-in battery, MP3 players, or PMPs made by some manufacturers because the product can take too long to recognize these devices.

  ✎ If you set the On Timer to play a file saved on a USB HDD, it may take up to 40 seconds or more to play the file after the product is turned on.

- Off Timer

  Set Off Timer so that your product turns off automatically at a time and on a day of your choosing. You can set up three separate Off Timer configurations. (Off Timer 1, Off Timer 2, Off Timer 3)

  ✎ You must set the clock before you can use the Off Timer.

  Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want Off Timer to turn off your product.

  ✎ The ✓ mark indicates days you'veselected.

  Time: Set the time that the product turns off automatically.

Economical Solutions

Eco Solution

Menu → System → Eco Solution

- Energy Saving

  Lets you adjusts the brightness of the product in order to reduce power consumption. If you select Picture Off, the screen is turned off, but the sound remains on. Press any button except the volume button to turn on the screen.

- No Signal Power Off

  To avoid unnecessary energy consumption, you can set how long you want the product to remain on if it's not receiving a signal.

- Auto Power Off

  The product will automatically turn off if you don't press a button on your remote or product controller within 4 hours to prevent overheating.

Security

Menu → System → Security

Using this function, you can configure programme related security options. Every time you access the Security functions, the PIN screen will appear and you must enter that PIN. The PIN screen closes and the Security menu appears.

- Channel Lock

  Lock channels in Channel menu, to prevent unauthorized users, such as children, from watching unsuitable programme.

  ✎ Available only when the Source is set to TV.

- Programme Rating Lock

  (Depending on the country)

  When turned on, the Programme Rating Lock feature can automatically block programmes that you deem inappropriate for your children. You must enter a PIN (personal identification number) before you can set or change any of the Programme Rating Lock restrictions.

  ✎ The items of Programme Rating Lock differs depending on the country.

  TV Rating: You can block product Programmes based on their ratings. This function allows you to control what your children can watch.

- Change PIN

  The Change PIN screen will appear. Choose any 4 digits for your PIN and enter them in the Enter New PIN. Reenter the same 4 digits in the Confirm New PIN. When the Confirm screen disappears, select Close. The product has memorised your new PIN.

How to watch a restricted programme or movie

If the product is tuned to a restricted programme or movie, the Programme Rating Lock will block it. The screen will go blank and the popup message appears. Enter the PIN to unblock the programme or movie using your remote.

Picture In Picture (PIP)

PIP

Menu → System → PIP

You can watch a Programme whose signal has passed through the product's tuner and watch video from one external video source simultaneously.

For example, if you have a cable box connected to the Cable In jack, you can use PIP to watch Programmes from the cable box and a movie from a Blu-ray player attached to the HDMI In jack.

✎ While Smart Hub or Programme Rating Lock is on, you cannot use the PIP.

- PIP

  Activate or deactivate the PIP function.

- Channel

  Select the channel for the sub-picture screen.

- Size

  Select a size for the sub-picture screen.

- Position

  Select a position for the sub-picture screen.

- Sound Select

  You can choose to listen to the sound from the main picture or the sub picture.

  ✎ If you turn the product off while watching in the PIP mode, the PIP function is reset to Off. When you turn your product on, you must turn PIP on again to watch in the PIP mode.

  ✎ You may notice that the picture in the PIP screen becomes slightly unnatural when you use the main screen to view a game or karaoke.

  ✎ PIP Settings: The picture from the external video source will be in the main screen and the picture from the product's tuner will be in the PIP sub-picture screen.

  – Main picture: Component, HDMI, PC

  – Sub picture: TV

Device Manager

Menu → System → Device Manager

Using this function, you can set up a keyboard or mouse to use with the product. You can view your device lists and adjust keyboard or mouse settings in this menu.

✎ Depending on the model of the USB HID keyboard and mouse may not be compatible with your product.

- Keyboard settings

  Lets you use a USB keyboard with your product. If you want to use a USB keyboard, connect it to the USB port. If you want to use a Bluetooth keyboard, connect it using the Bluetooth function.

  Select keyboard

  Select which keyboard to use from your keyboard list. you can only use one keyboard at a time, even if several are connected.

  Keyboard Options

  Sets the default options for the keyboard language and type.

  – Keyboard Language: Set a language for your keyboard.

  – Keyboard type: Set what a type of keyboard you're using to enter text.

  – Switch Input Language: Select a key sequence to change switching input language.

Preference Features

- Mouse settings

  Lets you use a USB or Bluetooth mouse with your product. If you want to use a USB mouse, connect it to the USB port. If you want to use a Bluetooth mouse, connect it using the Bluetooth function. You can use a mouse in the TV's menu in the same way you use a mouse on your PC.

  Select mouse

  Select which mouse to use from your mouse list. You can only use one mouse at a time, even if several are connected.

  Mouse Options

  Sets the default options for the mouse buttons.

  – Primary Button: Select the main button you want to use click and select on screen.
  – Pointer Size: Set the size of the on-screen mouse pointer.
  – Pointer Speed: Select the speed of the mouse pointer.

Using the product's menu with a mouse

1. Connect a USB or Bluetooth mouse on your product.
2. Click a primary button you selected. The Go To pop-up appears.
3. Select Smart Hub or Menu in Go To.

4 Use the mouse the same way you would use a mouse on your computer. For example, to open Channel on the Smart Hub screen, click the Channel icon.

✎ To exit an entry field that does not close, click ↩ Return.

✎ To exit a menu or Smart Hub screen, click ↩ Return.

✎ To hide the mouse pointer, move it slightly off the bottom of the screen.

Other Features

Language

Menu → System → Language

- Menu Language

  Set the menu language.

- Teletext Language

  Set a desired language for teletext.

  ✎ English is the default in cases where the selected language is unavailable in the broadcast.

- Preferred Language

  Select a language, which will be the default language when a channel is selected.

Subtitle

(On-Screen Text Messages)

Menu → System → Subtitle

Use this menu to set the Subtitle mode.

- Subtitle

  Switches subtitles on or off.

- Subtitle Mode

  Sets the subtitle mode.

- Subtitle Language

  Sets the subtitle language.

  ✎ If the programme you are watching does not support the Hearing Impaired function, Normal automatically activates even if the Hearing Impaired mode is selected.

  ✎ English is the default in cases where the selected language is unavailable in the broadcast.

Preference Features

Digital Text

(Available only in U.K)

If the programme broadcasts with digital text, this feature is enabled.

MHEG (Multimedia and Hypermedia Information Coding Experts Group): An International standard for data encoding systems used in multimedia and hypermedia. This is at a higher level

than the MPEG system which includes data-linking hypermedia such as still images, character service, animation, graphic and video files as well as multimedia data. MHEG is user runtime interaction technology and is being applied to various fields including VOD (Video-On-Demand), ITV (Interactive TV), EC (Electronic Commerce), teleeducation, tele-conferencing, digital libraries and network games.

Auto Protection Time

If the screen displays a still image for a certain period of time you define, the product activates the screen saver to prevent the formation of burnt in ghost images on the screen.

Preference Features

General

Menu → System → General

- Max. Power Saving

  When the product is attached to a PC, conserves power by turning the product off when the PC is not used for period of time you specify.

  ✎ Available only when the Source is set to PC.

- Game Mode

  When you have connected a game console such as a PlayStation™ or Xbox™ to the product, you can enjoy a more realistic gaming experience if you set the Game Mode on.

  Precautions and limitations for Game Mode

  – Before disconnecting a game console and connecting another external device, set Game Mode to Off.

  – If you display the product menu in Game Mode, the screen shakes slightly.

  ✎ Game Mode is not available when the input source is set to TV.

  ✎ Set Game Mode to On only after connecting a game console. If you turn Game Mode on before you have attached the game console, you may notice reduced picture quality.

  ✎ If the Game Mode is set to On, Picture Mode is set to Standard and Sound Mode is set to Movie automatically.

- BD Wise

  Provides the optimal picture quality for Samsung DVD, Blu-ray and Home Theatre products which support BD Wise. When the BD Wise is set to On, the picture mode is automatically changed to the optimal resolution.

  ✎ Available when you connect Samsung products that support BD Wise through an HDMI cable to the product.

- Menu Transparency

  Adjust transparency of menu box.

- Sound Feedback

  Your product gives sound feedback when you use product. Sound Feedback is enabled by default. Turn off Sound Feedback or adjust its volume.

- Panel Lock

  Lock or unlock all the keys on the product Controller at once. When Panel Lock is on, the product Controller does not operate.

- Connect USB Hub to

  The USB Hub can be connected to the PC via a USB cable. USB Hub can't support product when connected to the PC.

  ✎ After connecting a mouse and keyboard to the product and setting the Connect USB Hub to to PC, you can use the Desktop connected via USB. In this case, even if you shutdown the Desktop, the Connect USB Hub to setting remains PC. To change the setting to TV, you have to directly change the setting with the remote control.

- Boot Logo

  Displays the Samsung logo when the product is turned on.

Preference Features

Anynet+ (HDMI-CEC)

Menu → System → Anynet+ (HDMI-CEC)

Allows you to control all connected Samsung devices that support anynet+ with your Samsung product's remote. For details on set up options, refer to the "Anynet+ (HDMI-CEC)" instructions. (page 161)

DivX® Video On Demand

Menu → System → DivX® Video On Demand

Shows the registration code authorized for the product. If you connect to the DivX web site and register with 10-digit registration code, you can download the VOD activation file. Once you play it using Media Play, the registration is completed.

✎ For more information on DivX(R) VOD, visit http://vod.divx.com.

Common Interface

Menu → System → Common Interface

- CI Menu: This enables the user to select from the CAM-provided menu. Select the CI Menu based on the menu PC Card.
- Application Info: View information on the CAM inserted into the CI slot and on the "CI or CI+ CARD" which is inserted into the CAM. You can install the CAM anytime whether the product is on or off.

1. Purchase a CI CAM module at your nearest dealer or by phone.
2. Firmly insert the "CI or CI+ CARD" into the CAM in the direction of the arrow.
3. Insert the CAM with the "CI or CI+ CARD" into the common interface slot, in the direction of the arrow so that it aligns parallel with the slot.
4. Check if you can see a picture on a scrambled signal channel.

Self Diagnosis

Menu → Support → Self Diagnosis

- Picture Test

  Use to check for picture problems. Picture Test displays a high definition picture that you can examine for flaws or faults.

  Yes: Select Yes if the test picture does not appear or there is noise or distortion in the test picture. There may be a problem with the product. Contact Samsung's Call Centre for assistance.

  No: Select No if the test picture displays properly. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- Sound Test

  Use the built-in melody to check for sound problems.

  ✎ If you hear no sound from the product's speakers, before performing the sound test, make sure Speaker Select is set to TV Speaker in the Sound menu, and then try the speakers again.

  ✎ You will hear the melody during the test even if you have set Speaker Select to External Speaker or have muted the sound.

  Yes: Select Yes if you can hear sound from only one speaker or from neither speaker during the sound test. There may be a problem with the product. Contact Samsung's Call Centre for assistance.

  No: Select No if you can hear sound from the speakers. There may be a problem with your external equipment. Please check your connections. If the problem persists, refer to the external device's user manual.

- Signal Information

  (Digital channels only)

  The reception quality of over-the-air HD channels is either perfect or the channels are unavailable. Signal Information displays HD channel signal strength so you can adjust your aerial to increase signal strength and receive HD channels.

- Reset

  Reset all setting to factory defaults except for your network settings.

  To reset your product to default setting, follow these steps:

  1. Go to the Reset menu. (Support → Self Diagnosis → Reset)
  2. The PIN input screen appears. Enter the four digit security PIN using your remote.
  3. When done, the PIN screen disappear automatically. The message "All the settings will return to factory defaults." appears.
  4. Select Yes. All settings are reset. The product will turn off and on again automatically. The Setup screen appears. For more information about Setup, see the paper user manual.

Software Upgrade

Menu → Support → Software Upgrade

The Software Upgrade menu lets you upgrade your product's software to the latest version.

Current Version: This is the software version already installed in the product.

Upgrading to the Latest Version you can upgrade in five ways:

You can upgrade in four ways:

- By USB
- By Online
- By Channel
- Alternative Software
- Standby Mode Upgrade

The five methods are explained in the following pages.

✎ Be careful not to turn off the power until the upgrade is complete. The product will turn off and on automatically after completing the software upgrade. When you upgrade software, all video and audio settings you have made will return to their default settings. We advise you to write down your settings so that you can easily reset them after the upgrade.

Preference Features

- By USB

  To upgrade the By USB, follow these steps:

  1. Visit www.samsung.com.
  2. Download the latest USB software upgrade exe archive to your computer.
  3. Extracts the exe archive to your computer. You should have a single folder with the same name as the exe file.
  4. Copy the folder to a USB flash drive.
  5. Turn on the product, and then insert the USB flash drive into the USB port of the product.
  6. In the product's menu, go to Support → Software Upgrade.
  7. Select the By USB.

  ✎ Please be careful not to remove the USB drive until the upgrade is complete.

- Online

  The Online function lets you download the upgrade software directly from the Internet into your product and then upgrade the software in one operation. To use Online, you must have configured your product to connect to your network and the product must be connected to the Internet. See the "Setting up the Network" instructions.

  To upgrade using the By Online, follow these steps:

  1. Select the By Online. The Connecting to Server message appears.
  2. If there is a download available, the Download pop-up appears with a progress bar and the download starts.
  3. When the download is complete, the Upgrade Query screen appears with three choices: Upgrade Now, Upgrade Later, or Don't Upgrade.
     - If you select the Upgrade Now, the product upgrades the software, turns off, and then turns on automatically.
     - If you do not make a selection in one minute or select the Upgrade Later, the product stores the new upgrade software. You can upgrade the software later using the Alternative Software function.
     - If you select the Don't Upgrade, the product cancels the upgrade.

- By Channel

  Upgrade the software using the broadcasting signal.

  - If the function is selected during the software transmission period, software will be automatically searched and downloaded.
  - The time required to download the software is determined by the signal status.

Preference Features

- Alternative Software

  The Alternative Software option lets you upgrade using a file the product downloaded earlier, but you decided not to install immediately, or a file downloaded by the product in Standby Mode (See Standby Mode Upgrade in the next section).

  To upgrade using Alternative Software, follow these steps:

  1. If upgrade software has been downloaded, you will see the software version number to the right of Alternative Software.
  2. Select Alternative Software.
  3. The product displays a message asking if you want to upgrade. Select Yes. The product begins the upgrade.
  4. When the upgrade is complete, the product turns off automatically, and then turns on.

- Standby Mode Upgrade

  You can set the Standby Mode Upgrade function so that the product downloads new upgrade software when it is in Standby mode.

  In Standby mode, the product is off, but its Internet connection is active. This allows the product to download upgrade software automatically, when you are not using it. Because the product is turned on internally, the screen may glow slightly. This phenomenon may continue for more than 1 hour until the software download is complete.

  To set Standby Mode Upgrade, follow these steps:

  1. Select the Standby Mode Upgrade.
  2. Select Off, 1 hour later, 2 hours later, 0:00, 2:00, 12:00 or 14:00.
     - Off: If you select Off, the product will notify you with a pop up message when new upgrade software is available.
     - 1 hour later, 2 hours later, 0:00, 2:00, 12:00 or 14:00: The product will automatically download new upgrade software when it is in Standby mode with the power off.

  ✎ To use the Standby Mode Upgrade function, your product must be connected to the Internet.

Preference Features

Contact Samsung

Menu → Support → Contact Samsung

View this information when your product does not work properly or when you want to upgrade the software. You can find information regarding our call centres and how to download products and software.

Remote Management

Menu → Support → Remote Management

The Call Centre will access your Remote Management lets our Call Centre access and control your Samsung Product remotely to troubleshoot a problem. Use Remote Management only when you have a problem, and contact our Call Centre first, before you activate Remote Management. You can find the current number of our Call Centre on the Support page at www.samsung.com under Contact support.

Smart Hub

Menu → Support → Smart Hub

Smart Hub lets you connect to the Internet and enjoy variety of Internet and multimedia contents. For more information on how to use the Smart Hub, see Smart Hub section of this manual. (page 94)

Advanced Features

Smart Hub

Menu → Support → Smart Hub

Using Smart Hub, you can stream movies, videos, and music from the Internet, access various for pay or free-of-charge applications and view them on your product.

Application content includes news, sports, weather forecasts, stock market quotes, maps, photos, and games.

✎ You can also start this function by pressing the button on the remote control.

Notice

- Samsung Electronics takes no legal responsibility for any interruption of the Smart Hub service caused by the service provider for any reason.
- Application services may be provided in English only and the contents available may vary, depending on your area.
- For more information about a Smart Hub service, visit the web site of the applicable service provider.
- The Smart Hub service downloads and processes data via the Internet so that you can enjoy the Internet contents on your product screen. If the Internet connection is unstable, the service may be delayed or interrupted. Furthermore, the player may turn off automatically in response to conditions on the Internet. If this occurs, check the Internet connection and try again.
- The services provided are subject to change by the Smart Hub service provider without notice.
- The Smart Hub service contents may differ depending on the player's firmware version.
- For pay DivX contents with copy protection can only be played through a composite, a component or an HDMI cable.

Advanced Features

To start Smart Hub for the first time, follow these steps:

1. Press the button.
2. The Smart Hub screen appears. In a few cases, the Country screen appears immediately after.
3. If the Country screen has appeared, select your country using your remote.

   ✎ Some applications are available only in certain countries.
4. The General Disclaimer screen appears. Select Agree.

   ✎ Screens can take a few seconds to appear.
5. The Privacy policy screen appears. Select Agree.

   ✎ The Update Pop-up appears. Select OK.
6. The Service Update screen appears and installs a number of services and applications. When done, it closes. The applications and services downloaded are displayed on the Smart Hub screen. This may take some time.

   ✎ Smart Hub may close momentarily during the installation process.

   ✎ A number of screens may appear after installation. You can close them or let them close on their own.
7. To start an application, select an application using your remote.

Advanced Features

Using the Keypads and Keyboards

A number of Smart Hub applications display a numeric keypad or a QWERTY keyboard so you can enter account names, passwords, and other data. In most applications, you can toggle between the numeric keypad and the QWERTY keyboard by selecting the B button.

Using the Numeric Keypad

When the keypad is displayed, you can use your remote to enter letters in lower or upper case, numbers, punctuation, and symbols.

There are two ways to enter characters, in the ABC mode and in the XT9 mode.

Method 1: Using the keypad of ABC type.

1. For example, suppose that you want to input “105Chang”.
2. Select TTX/MIX 3 times using your remote to change the input mode from lower case to numbers.
3. Select 1, 0 and 5 in numerical order.
4. Select TTX/MIX 3 times using your remote to change the input mode from numbers to upper case.
5. Select 2 three times using your remote to input C.
6. Input the rest of “Chang” using your remote in the same way. When done, select OK.

Method 2: Using the Keypad of XT9 type.

To change to XT9 mode, follow these steps:

A. With the Numerical keypad displayed, open the Tools menu using your remote.

B. On the Tools menu, select XT9 text input.

C. Select On, and then select OK.

1. For example, suppose that you want to input “105Chang”
2. Select TTX/MIX 3 times using your remote to change the input mode from lower case to numbers.
3. Select 1, 0 and 5 in numerical order.
4. Select TTX/MIX 3 times using your remote to change the input mode from numbers to capitalized case.
5. Select in sequence: 2, 4, 2, 6, 4. A thin window appears at the top of the screen displaying a list of words you can enter.

Advanced Features

Using the QWERTY Keypad

You can use this Screen Keypad in a several Smart Hub applications in same way as a keyboard.

Using the coloured and function buttons with the QWERTY Keypad

- A Delete All

  Delete all inputted character.

- B Numeric / QWERTY

  Toggles the keypad mode between Numeric keypad mode and QWERTY mode.

  ✎ When the keypad is set to QWERTY mode, you can input characters using a USB or Bluetooth keyboard connected on the product.

- C Space

  You can enter a space character.

- Settings

  Displays the options menu.

  Input Language: Select an input language.

  XT9 text input: Turns the XT9 word function on or off. Available in both Numeric Keypad and QWERTY mode when you use the remote or a mouse to select and enter characters.

- Enter

  Enter the selected character.

- Return

  Return to the previous menu.

- Prev Page

  Display the previous set of symbols/icons.

  ✎ Available only when the keypad screen is icon mode (F).

- Next Page

  Display the next set of symbols/icons.

  ✎ Available only when the keypad screen is in symbol/icon mode (F).

Creating an Account

To establish your own, exclusive, configuration of Smart Hub, create your own Samsung account.

✎ You must use an e-mail address as an ID.

✎ You can register up to 10 User Accounts.

✎ You do not need an account to use the Smart Hub.

To create an account, follow these steps:

1. On the Smart Hub screen, select A using your remote. The Login screen appears.
2. Select Create Account using your remote. The Create Account screen appears.
3. Select Samsung Account. An entry screen and keypad appear.
4. Use the keypad to enter your e-mail address. This will serve as your ID.
5. When done, select OK. The Login screen reappears.
6. Select Password. The Password screen and a keypad appear.
7. Use the keypad to enter a password. The password can be any combination of letters, numbers, and symbols.

   ✎ select A using your remote to display or hide the password as you enter it.
8. When done, select OK.
9. Select Confirm Password. The Password screen and a keypad re-appear.
10. Repeat Steps 7 and 8.
11. When done, select Create Account. The Confirmation window appears.
12. Select OK. The Continue to register service ID window appears.
13. Select OK.

    ✎ If you don't have existing provider accounts or do not want to register existing accounts at this time, select Cancel. You can also let the window close on its own in about a minute.
14. The Link to other accounts window appears.

    ✎ If you have existing accounts with any of the listed providers, you can associate the provider account and the provider account password with your Samsung account. Registration makes it easier to access the providers web site. For registration instructions, go to Step 2 in Account Management under Settings in the "Configuring the Smart Hub with Settings" section of this manual. (page 103)

Customizing the Home Screen

- A Login / Logout

  To log in to your Samsung Account, follow these steps:

  1. With the Smart Hub main screen displayed on your product, select A using your remote. The Login screen appears.
  2. Select the ▼ next to the Samsung Account entry filed. A drop down list appears.

     ✎ If you want to input your Samsung Account name manually, select the Samsung Account entry field. A keypad screen appears. Input your Samsung Account manually. When done, go to Step 4.
  3. Select your ID from the list that appears. The Login screen re-appears.
  4. Select Password. The Password window and a keypad appears.
  5. Enter your password using your remote. When done, select OK.

  ✎ If you want Smart Hub to enter your password automatically, select Remember my password. after you have entered your password. A ✓ mark appears. Smart Hub will now enter your password automatically when you select or enter your ID.

  ✎ If you want to log in the to Smart Hub automatically when Smart Hub function starts, select Delete history. A ✓ mark appears.

  ✎ When you forgot password, you can reset your Samsung account password. Select B using your remote. A pop-up message appears, and the select OK. The guide to resetting your password will be sent to your e-mail.

- B Wallpaper

  You can change the background image on the Smart Hub home screen.

- C Account Manager

  Lets you register your service provider accounts, delete or deactivate your Samsung Account. For more information about Account Manager, see "Configuring Smart Hub with Settings" in this section.

  ✎ Available only when you have logged in to Smart Hub.

Using the Tools menu with Smart Hub

✎ Depending on the icons and folders displayed on the Smart Hub screen, some of the functions listed below may not appear.

- Login / Logout

  Log in or log out to your Samsung account.

- Wallpaper

  You can change a background image on the Smart Hub home screen.

- Move

  The Move function lets you change the screen position of an application or a folder.

  To use the Move function, follow these steps:

  1. Select an application icon or a folder, and then open the Tools menu using your remote.
  2. Select the Move. A position change screen appears.
  3. Move the icon using your remote. When the icon is in the position of your choice, select the icon. The application icon moves to its new location.

- Move to Folder

  The Move to Folder function lets you move an application to a folder.

  To use the Move to Folder function, follow these steps:

  1. Select an application, and then open the Tools menu using your remote.
  2. Select the Move to Folder. The Move to Folder window opens.
  3. Select a folder using your remote. A move finished message appears. Select OK. The message window closes. The application has been moved to the folder.

  ✎ If you select an application in a folder, you can use the Move to Folder to move the application to the Smart Hub screen.

  To access an application in a Folder

  1. On the Smart Hub screen, select a folder. The folder opens.
  2. Select an application you want to execute. The application service starts.

- Delete

  The Delete function lets you delete application from the Smart Hub.

  To use the Delete function, follow these steps:

  1. Select an application, and then open the Tools menu using your remote.
  2. Select the Delete. The message Do you want to delete the selected item(s)? appears.
  3. Select OK. The application is deleted.

- New Folder

  The New Folder function lets you create and name new folders. You can move applications into the folders you have created.

  To use the New Folder function, follow these steps:

  1. Open the Tools menu using your remote.
  2. Select the New Folder. The New Folder pop-up and a keyboard screen appear.
  3. Using the keyboard and your remote, enter a name for the folder.
  4. When done, select OK. The New Folder screen closes and the New Folder appears on the Smart Hub screen.

- Rename Folder

  The Rename Folder function lets you rename folders.

  To use the Rename Folder function, follow these steps:

  1. Select a folder, and then open the Tools menu using your remote.
  2. Select Rename Folder. The Rename Folder window and a keypad screen appears.
  3. Enter a new name using your remote.
  4. When done, select OK. The Rename Folder window closes and the new name appears below the folder.

- Lock

  The Lock function lets you lock some application in Smart Hub so they cannot be opened without entering the password.

  ✎ Depending on the application, this function may not be supported.

To use the Lock function, follow these steps:

1. Select an application, and then open the Tools menu using your remote.
2. Select Lock. The Security window appears.
3. Enter your password.
4. A confirming message screen appears. Select OK. The message screen closes and a lock symbol appears to left of the application.

- Unlock

  ✎ Depending on the application, this function may not be supported.

  To use the Unlock function, follow these steps:

  1. Select a locked application, and then open the Tools menu using your remote.
  2. Select Unlock. The Security window appears.
  3. Enter your password.
  4. A confirming message screen appears. Select OK. The message screen closes and the lock symbol to left of the application disappears.

- Information

  You can view the detailed information about the selected application.

  ✎ Depending on the application, you can also lock or unlock the application on the Detailed Information screen.

Configuring the Smart Hub with Settings

The Settings menu gives you access to Account Manager, Service Manager, Reset and About Smart Hub functions. To use these three functions, you must be logged into your Samsung Smart Hub account.

To access the Settings menu, and then select a menu item, follow these steps:

1. Open the Tools menu using your remote.
2. Select Settings. The Settings window appears.
3. Select a menu item using your remote.

- Delete browsing data

The Delete browsing data menu contains functions that let you register your service provider accounts, and delete or deactivate your Samsung Account.

Reset Settings: If you have existing accounts with any of the providers listed by the Reset Settings function, you can associate the provider account and the provider account password with your Samsung account. If you associate the account, you will be able to log onto the account through Smart Hub easily, without entering your account name or password.

✎ Before register your site account, corresponding application should be installed in the Smart Hub.

To use the Reset Settings function, follow these steps:

1. In the Delete browsing data menu, select the Reset Settings. The Reset Settings window appears.
2. Select an application you want to associate with your Samsung account.
3. In the pop-up that appears, select Register.
4. In the Link to other accounts entry screen, enter your site ID and password using your remote. When done, select OK.

   ✎ This is the ID and password you normally use to access your account on this application.
5. If you have entered the ID and password correctly, the Registered successfully. message appears.
6. If want to add another service application, and then repeat Steps 2 through 4 to associate another service application.
7. When done, select OK.

Remove from TV account list: Cancels all the currently registered Service Accounts that appear on the Link to other accounts screen.

Deactivate account: Deactivates your Samsung Account and deletes it and all your account settings entirely from the Smart Hub.

- Service Manager

  Auto Ticker: You can set Auto Ticker to come on when the product powers.

  ✎ The Ticker application provides useful News, Weather, and Stock Market information. Before you can set the Auto Ticker on, you must download the Ticker application into Smart Hub.

  ✎ Depending on your country, the Ticker application may have a different service or not be supported.

  Push Notification Settings: When on, Push Notification that displays a notification message when an event takes place in an application installed on Smart Hub. The product will display the notification message and allow you to view details of the event even while you are viewing product.

- Reset

  The Reset function initializes all downloaded applications, erases all user accounts and settings from the product, and resets all Smart Hub settings to the factory default settings. It then restarts Smart Hub as if it were starting for the first time.

  Your account, however, remains on the Smart Hub server. To log into your account, enter your ID and password on the Login screen.

  To use the Reset function, follow these steps:

  1. In the Settings menu, select Reset. The Reset screen appears.
  2. Enter the security PIN using your remote.
  3. After a few moments, Smart Hub automatically resets. The screen may go black, and then Smart Hub reappears. In a few moments, it starts the re-initialization procedure.
  4. To complete the re-initialization, go to Step 2 in "To start Smart Hub for the first time, follow these steps:" section of this manual. (page 95)

- Auto select

  The Auto select menu contains functions that display information about Smart Hub.

  More: Lists information about Smart Hub version, Memory Usage, and the Unique ID.

  Terms of Service Agreement: Displaythe Terms of Service Agreement.

Samsung Apps

→ Samsung Apps

Samsung Apps is a store from which you can download applications to use on Samsung TV/AV equipment. You can enjoy a variety of contents such as videos, music, photos, games, useful information etc. using the downloaded applications.

New applications are added regularly.

Using the coloured and function buttons with the Samsung Apps

- A Login / Logout

  Log in to or log out of your Samsung Account.

- B Filter by Price

  To toggle the view between All, Paid and Free.

- C Sort

  To sort the applications by Recommended, Name, Date, or Use Mode.

  ✎ You can sort all categories except Most Popular.

- D View Mode

  Each time you select D using your remote, the View Mode toggles between basic mode and thumbnail mode.

- ◀◀ Previous

  Move to previous page.

- ▶▶ Next

  Move to next page.

- Tools

  Displays the option menu.

- Return

  Moves to previous menu.

Using Samsung Apps by category

The following categories are available:

- Most Popular

  Displays the most popular applications for users.

- Videos

  Includes apps that provide video media such as movies, product shows and short length videos.

- Games

  Includes various game apps such as sudoku and chess.

- Sports

  Includes apps that provide sports content such as game results, images and short length video.

- Lifestyle

  Includes apps that provide lifestyle media services such as music, personal photo management tools, and social networking such as Facebook and Twitter.

- Information

  Includes apps that provide information content such as news, financial information, stock quotes, weather, etc.

- Education

  Includes apps that provide education contents such as story book, dictionary, VOD (Video on Demand) for kids etc.

- My Apps

  My Apps provides information about your available App cash coupon and information about the apps you have already purchased or installed on your product.

  ✎ You can purchase App cash that you can use to buy applications through tv.samsungapps.com.

  ✎ Downloaded apps displays the list of free apps that are installed on the product.

- Help

  If you have questions about Samsung Apps, check this section first.

To search an application in Samsung Apps, follow these steps:

1. On the Samsung Apps screen, select Search Samsung Apps. The Search and keyboard appears.
2. Enter a keyword you want to search using your remote.
3. When done, select OK at the bottom of the keyboard.
4. Wait until the search result screen displays. After Samsung Apps displays the results, you can select an application you want in the search result screen.

   ✎ You can find a keyword in the search history If you have searched using that keyword before.

   ✎ If you have a keyboard and/or a mouse connected to your product, you can use the mouse to select the Search Samsung Apps field and the keyboard to type in the keyword.

Advanced Features

Search

→ Search

(May not be available, depending on your country.)

Easily search for and access content from diverse sources (e.g. applications, Your Video, AllShare Play)

1. On the Smart Hub, select Search at the top of the screen or press the Search button on your remote.
2. If you want to input a search term directly, select Enter search keyword. entry field. A keypad screen appears. Enter the search term using your remote.

   ✎ If you want to search by category, select a category below the field using your remote.

Using the Search function by category

- Your Video

  Personalize your movie-watching with a customized video on demand (VOD) recommendation service.

- Most searched

  You can search by selecting a key word in the key word list. The key word list displays words you frequently use for searches.

- Top application

  You can search applications and services in the application list. The application list displays apps that users download frequently.

- Search history

  You can find the keyword in the search history list if you searched a keyword before.

Using the Coloured and function buttons with the Search

- B Refresh

  Refresh the Search function.

- Tools

  You can set general parameters for the Search function or delete the search history.

- Return

  Return to the previous menu.

Advanced Features

Using the Tools menu with Search

- General Settings

  Keyword recommendation: Turns the Keyword Recommendation function on or off.

  Search area: Sets a search scope. The default is allowed all application.

  To customize a search area follow these steps:

  1. On the Search screen, open the Tools menu using your remote.
  2. Select General Settings.
  3. Select an application in the Search area. A ✓ mark disappears in the check box.
  4. When done, Press the RETURN button.

- Search history

  You can delete the keyword in the search history. Also, If you select Delete All, delete all your search history.

Advanced Features

Your Video

→ Your Video

(May not be available, depending on your country.)

Using this service from Smart Hub, you can get video recommendation, search for movies from multiple providers, and stream or purchase movies. To stream or purchase movies, you must have the vendors app installed in Smart Hub. Depending on the vendor, you may also need a vendor account.

Using the Your Video Search Tab

1. On the Smart Hub screen, select Your Video.
2. If this is the first time you have accessed Your Video, the Privacy Notice appears. Read the notice, and then select Agree.
3. When the Your Video screen appears, it displays a list of recommended movies with Recommended at the top of the screen highlighted. Move the highlight from the top of the screen down to the first movie, and then scroll the movies to the right to view all the movies in the list.
4. To see additional lists of movies, move the highlight back to the top of the screen. You can select - in addition to Recommended - New releases, Top 20 films, Top 20 TV shows, and From friends.
5. To select a movie, highlight it, and then press the ↵ button on your remote. The movie's Data screen appears. On this screen you can view Basic Information, Director/Cast, Photos, Awards, and Related movies.
6. To watch the movie, select Watch. A list of online vendors that have the movie available for rent or purchase appears. Renting usually means you can stream the movie for a certain number of hours or days.

   ✎ To go to a vendor's web site, you must have that vendor's app installed in Smart Hub. To install apps, access Samsung Apps on the main Smart Hub screen.
7. You can search for a particular movie. To search, select C with your remote. The Search Entry screen and a keyboard appear.
8. Enter the name of the movie into the Search field. As you enter characters, the Search function will display suggestions below. You can either continue entering characters, or, if your movie appears, move the highlight down and select it. The movie's Data screen appears (See Steps 5 and 6).

   ✎ If you are entering using a keyboard, you can either press Enter or you can move the highlight down using the down arrow key.

Using the Function and Colored Buttons on the Search Tab

- A Login / Logout

  To logi n to your Smart Hub account or log out.

- C Search

  To search for movies or videos (Steps 7 and 8).

- My Page

  Displays your My Video Bookmarks, Likes/shares (if you have a Facebook or Twitter account registered in Smart Hub), and lets you establish certain Preferences.

- Return

  Return to the previous menu.

Using Function and Colored Buttons on a Movie's Data Page

- A Login / Logout

  To log in to your Smart Hub account or log out.

- B Bookmark / Unbookmark

  To bookmark a movie or video or to remove the bookmark. When you bookmark, Bookmark appears on the left side of the screen. Bookmarked movies or videos are listed on My Page.

- C Search

  To search for movies or videos (Steps 7 and 8).

- D Home

  To go to the My Video Home screen.

- My Page

  Displays your My Video Bookmarks, Likes/shares (if you have a Facebook or Twitter account registered in Smart Hub), and lets you establish certain Preferences.

- Return

  Return to the previous page or menu.

Using the Your Video Genre Tab

When you start Your Video, the Your Video screen displays the Search tab. You can also display the Genres tab which sorts movies and videos by genre.

1. On the Your Video Search tab, move the highlight to the bottom of the screen, and then select Genres. The Genres tab appears.
2. On the Genres tab, select either Movies or TV show on the left side of the screen
3. On the right side of the screen, select the genre (Action/adventur, Animated, etc.). Your Video displays the Genre Movie or product Show List screen with the movies or product shows in the genre you selected.
4. Highlight a movie or product show and then select it. The Data screen for that movie or product show appears.

Using the Function and Colored Buttons on a Genre Movie or product Show List Screen

- A Login / Logout

  To log in to your Smart Hub account or log out.

- B Genres

  To re-display the Genres tab.

- C Search

  To search for movies or videos.

- D Sort

  To sort movies or videos by Ratings, Year, or Title.

- My Page

  Displays your My Video Bookmarks, Likes/shares (if you have a Facebook or Twitter account registered in Smart Hub), and lets you establish certain Preferences.

- Return

  Return to the previous page or menu.

Advanced Features

Using My Page

My Page displays your My Video Bookmarks, Likes/shares (if you have a Facebook or Twitter account registered in Smart Hub), and lets you establish certain Preferences. When the T My Page icon is displayed at the bottom of a screen, select or press Tools. My Page appears displaying your bookmarked movies and videos. Select a bookmarked movie or video, access your Likes/shares, or view or change your Preferences.

Using the Function and Colored Buttons on the My Video Screen

A Login / Logout

To log in to your Smart Hub account or log out.

C Search

To search for movies or videos.

D Home

To go to the My Video Home screen.

Return

Return to the previous page or menu.

Family Story

→ Family Story

Family Story feature allows you to share photos, messages, and events with your family.

- Create Group

  If you are starting Family Story for the first time among your family members, you can create a group and invite members.

- Invite Members

  After creating a group, you can invite your family members who you want to share your family's photos and events with.

- Join Group

  If you were invited to this service from your family member, you can select Join Group to enjoy Family Story service.

To create a family group, follow these steps:

1. On the Smart Hub screen, select Family Story. The Family Story screen appears.
2. Select Create Group. The Create Group screen appears.
3. Select Agree. It is required to agree with the terms prior to using Family Story.
4. Enter a Group Name, Your Name and Your Phone Number using your remote.

   ✎ If you want to add a group image, select an image box. (An external device containing photos must be connected to your product via USB.)

   ✎ * Fields marked with an asterisk are required.

5. When done, select Done. The group creation is completed.

   ✎ If you want to invite members to your group, select Invite Members. If you want to go your Family Story, select Go to Family Story.

To invite members to your Family Story, follow these steps:

1. From the starting menu of Family Story, open the Tools menu using your remote, and then select Group Members. The Group Members screen appears.
2. Select Invite Members. The Invite Members for your Family Story screen appears.
3. Select Select to enter Name.. The keypad screen appears.
4. Enter member's name using your remote. When done, select Done.
5. Select Phone number or Samsung account ID. The keypad screen re-appears.
6. Enter member's phone number or samsung account ID using your remote. When done, select Done.
7. When done, select Done.

   ✎ If you want to add more members, select Add Member, and repeat the Step 3 and 7.
8. New member invitation has been completed.
9. If invited by phone number, 4-digit invite code will be generated and the code need to be shared with the member. If invited by Samsung Account, the member will be notified about the invitation via e-mail. Select OK to finish.

To join a group using the received invite code, follow these steps:

1. Start Family Story and accept the terms.
2. You will see a pop-up message asking about invitation type. If you were invited by phone number, please select Invite Code. If you were invited by Samsung account, please select Samsung Account.
3. If joining by Samsung Account, a list of invitations from your family groups will be displayed. Select Accept to join. You can select Deny if you don't want to join the inviting group.
4. If joining by Invite Code, first enter your phone number using your remote. When done, select Done. Then you will see a list of invitations from your family groups. Select Accept to join. You can select Deny if you don't want to join the inviting group. Enter the 4-digit invite code shared by your family member, and then select Deny to finish.
5. Select OK. Joining your family group has been completed.

Advanced Features

Creating an Album

You can upload pictures from a USB device and create a picture album which other group members can view and add to.

To create a picture album, follow these steps:

1. Attach a USB device containing the pictures you want to upload to the picture album to your product.
2. Log into your Smart Hub account, and then start Family Story.
3. Highlight and select the "create album" display on the left side of the Family Story screen or select B Create using your remote. The Create screen appears.
4. Highlight and select Add on the Album tab. The File Browser screen appears.
5. Highlight and select the USB device. The device opens, displaying either folders or picture files.
6. If picture files are displayed, highlight and select each file you want to upload. A check appears on each file.
7. If folders are displayed, highlight and select the folder that contains the pictures you want to upload. Then, select each file you want to upload. A check appears on each file.

   ✎ Your can highlight and select the Select All button on the right side if you want to select all displayed pictures.
8. When finished, highlight and select the OK button on the right side. The Create screen re-appears displaying some or all the photos you want to upload.

   ✎ To delete a photo from the upload queue, select Tools. In the Tools menu, select Delete Photos. Either highlight and select individual photors or select Delete All. When done, select the Delete button on the bottom of the page. A pop-up appears asking whether you want to delete the photos. Select Yes.
9. Highlight and select the Done button on the bottom of the screen. The photos are uploaded, and then the Story of the Day screen appears, displaying the photos.
10. Select Return. The Cover Story (Main Family Story) screen appears displaying the photos.

    ✎ The Cover Story screen runs a continuous slide show of photos you uploaded. It also displays some of the photos on a "shelf"below the slide show area.

Deleting a Picture

To delete a picture, follow these steps:

1. On the Cover Story screen, highlight and select the strip of photos on the bottom left. The Story of the Day screen appears.
2. Highlight and select the photo you want to delete.
3. Select Tools.
4. In the Tools menu, select Delete. A message appears asking if you want to delete the photo.
5. Select OK. The picture is deleted.

Advanced Features

Editing a Picture

The Edit function lets you add a memo to a picture or add the picture to an event.

To edit a picture, follow these steps:

1. On the Cover Story screen, highlight and select the strip of photos on the bottom left. The Story of the Day screen appears.
2. Highlight and select the photo you want to edit.
3. Select Tools.
4. In the Tools menu, select Edit. The Edit screen appears.
5. To add a memo, highlight and select the "enter Memo" field. The Enter Memo screen and keyboard appear.
6. To add the picture to an event, highlight and select Find event. The Events list screen appears. Use the left and right arrow buttons to change the month. Use the up and down arrow buttons to select an event. Press when done.
7. After you have added a memo or added the photo to an event, highlight and select Done on the bottom of the screen.

Creating a Memo

You can create a memo that all group members can see.

To create a memo, follow these steps:

1. Log into your Smart Hub account, and then start Family Story.
2. Highlight and select the "create memo" display on the right side of the Family Story screen or select B Create using your remote. The Create screen appears.
3. On the Memo tab, highlight and select the "enter Memo" area. The Enter memo screen and keyboard appear.
4. Use your remote to highlight and select letters. If you have a USB or Bluetooth keyboard attached to the product, use the Keyboard to type in letters.
5. When done, select OK on the on screen keyboard, press on your remote. If you are using a physical keyboard, press the Enter key on the key board. The Create screen re-appears displaying the memo.

   ✎ To edit the memo, highlight and select the "enter Memo' area again. The Enter memo screen and key board re-appear.
6. Highlight and select the Done button on the bottom of the screen. The Story of the Day screen appears displaying the memo.
7. Select Return to go back to the main Family Story screen.

Deleting a Memo

To delete a memo, follow these steps:

1. On the Cover Story screen, highlight and select the memos on the right side of the screen. The Story of the Day screen appears.
2. Highlight and select the memo you want to delete.
3. Select Tools.
4. In the Tools menu, select Delete. A message appears asking if you want to delete the memo.
5. Select OK. The memo is deleted.

Editing a Memo

To edit a memo, follow these steps:

1. On the Cover Story screen, highlight and select the memos on the right side of the screen. The Story of the Day screen appears.
2. Highlight and select the memo you want to edit.
3. Select Tools.
4. In the Tools menu, select Edit. The Edit screen appears.
5. Highlight and select the Edit field. The Memo screen and keyboard appears. Edit the memo, and then press when done.
6. The Edit screen re-appears. Highlight and select Done on the bottom of the screen.

Advanced Features

Creating an Event

You can create a record of an event, such as a birthday party or a wedding, with pictures, that all group members can see. You can also create a record for a future event.

To create an event, follow these steps:

1. Attach a USB device containing the pictures of the event that you want to upload to your Family Story.
2. Log into your Smart Hub account, and then start Family Story.
3. Highlight and select the "create event" display on the right side of the Family Story screen or select B Create using your remote. The Create screen appears.
4. On the Event tab, highlight and select the Event title field. The Event title screen and keyboard appear.
5. Use your remote to highlight and select letters. If you have a USB or Bluetooth keyboard attached to the product, use the keyboard to type in letters.
6. When done, select OK on the on screen keyboard, press ↵ on your remote. If you are using a physical keyboard, press ENTER on the keyboard.
7. Highlight and select Done on the Event title screen with your remote. The Event Tab reappears.
8. User your remote to highlight and select the "enter description field. The Enter Description screen and keyboard appear.
9. Enter a description of the event the same way you entered the Event title in Step 5. When done, close the Enter Description screen the same way you closed the Event title screen in Steps 6 and 7.
10. Highlight and select the From field. The Time Settings screen appears. Use the up and down arrow buttons on your remote to change the values in each field. Use the left and right arrow buttons to move from field to field. Press ↵ when done.
11. Hightlight and select the To field. The Time Settings screen appears. Set the To time the same way you set the From time in Step 10.
12. To define the Event Type, highlight and select the Change button. The Event Type list appears.
13. Use the up and down arrow buttons on your remote to select an event type. When done, press ↵. The Event Tab re-appears.

14. To add photos, highlight and select the Add button. The File Browser appears.
15. Highlight and select the USB device. The device opens, displaying either folders or picture files.
16. If picture files are displayed, highlight and select each file you want to upload. A check appears on each file.
17. If folders are displayed, highlight and select the folder that contains the pictures you want to upload. Then, select each file you want to upload. A check appears on each file.

✎ Your can highlight and select the Select All button on the right side if you want to select all displayed pictures.

18. When finished, highlight and select the OK button on the right side. The Event Tab re-appears displaying some or all the photos you want to upload.

    ✎ To delete a photo from the upload queue, select Tools. In the Tools menu, select Delete Photos. Either highlight and select individual photors or select Delete All. When done, select the Delete button on the bottom of the page. A pop-up appears asking whether you want to delete the photos. Select Yes.

19. When done entering all information and selecting all photos, highlight and select the Done button at the bottom of the Event Tab. Family Story uploads the photos you selected and then displays the Story of the Day screen.
20. Select Return to go back to the main Family Story screen.

Deleting an Event

To delete an event, follow these steps:

1. On the Cover Story screen, highlight and select the events on the bottom right side of the screen. The Story of the Day screen appears.
2. Highlight and select the event you want to delete.
3. Select Tools.
4. In the Tools menu, select Delete. A message appears asking if you want to delete the event.
5. Select OK. The memo is deleted.

Editing an Event

To edit an event, follow these steps:

1. On the Cover Story screen, highlight and select the events on the bottom right side of the screen. The Story of the Day screen appears.
2. Highlight and select the event you want to edit.
3. Select Tools.
4. In the Tools menu, select Edit. The Edit screen appears.
5. Edit the elements in the event in the same fashion you first entered them.
6. To remove a photo, highlight the photo, and then Select Tools.
7. In the Tools menu, select Disconnect photos.
8. Highlight and select individual photos or highlight and select Select All.
9. Highlight and select Delete. A message appears asking if you want to delet the photos. Select Yes.
10. When finished editing, highlight and select Done at the bottom of the page.

Functions on the Cover Story (Main) Screen

On the Cover Story screen, you can launch a slide show, display individual pictures, view memos, and view events.

Launching a Slide Show

1. On the Cover Story screen, highlight and select the large Slide Show area. This is the portion of the screen that displays constantly changing pictures. The slide show starts. The slide show controls are displayed momentarily, then disappear.
2. To stop or start the slide show and to re-display the controls, press on your remote.
3. To view individual pictures, stop the slide show, and then press the left or right arrow button on your remote.
4. To change the speed of the slide show, select the or button.
5. To end the slide show, select Return.

Advanced Features

Viewing Individual Pictures

1. On the Cover Story screen, highlight and select the strip of photos on the bottom right. The Story of the Day screen appears displaying the individual photos.
2. Highlight and select a photo. The individual photo is displayed.

- To add a comment about the photo, highlight and select the Add Comment button or select B Add Comment. The Comment screen and keyboard appear.
- To watch a slide show that includes the picture, highlight and select the picture. The slide show begins.
- To watch a slide show together with another member of your group, select C Watch together now. This function lets you and another member of your group watch the same slide show on your own products, even if you are thousands of miles apart.

Viewing Individual Memos

1. On the Cover Story screen, highlight and select the memos displayed on the right side. The Story of the Day screen appears displaying the individual memos.
2. Highlight and select a memo. The individual memo is displayed.

- To add a comment about the memo, highlight and select the Add Comment button or select B Add Comment. The Comment screen and keyboard appear.

Viewing Individual Events

1. On the Cover Story screen, highlight and select the events displayed on the right side. The Story of the Day screen appears displaying the individual events.
2. Highlight and select an event. The individual event is displayed.

- To add a comment about the event, highlight and select the Add Comment button or select B Add Comment. The Comment screen and keyboard appear.
- To watch a slide show of the pictures saved in the event, highlight and select the pictures at the bottom left of the screen. The slide show begins.

Advanced Features

The Tools Menu Functions

The Tools Menu appears on most of the Family Story screens. This section provides a run down of all the Tools Menu functions by screen.

Tools Menu Functions on the Cover Story Screen

Group Members: Lists the current group members and the current prospective members with invitations.

My groups: Lists the groups you are a member of. Also lets you access your groups.

Settings: Lets you edit your profile information and set whether your group will allow new content, new members, new invitations, and issue event reminders.

Logout: Logs you out of Family Story and your Smart Hub account. Returns you to the Smart Hub screen.

Create: Takes you to the Create screen where you can create a photo album, memo, or event record.

Updates: Lets you know if there is an update for the Family Story application, and lets you download and install it.

Tools Menu Functions on the Story of the Day Screen

Filter: Lets you select what to view on the Story of the Day screen by category: All, Album, Memo, Event.

View by Member: Lets you view entries (Albums, Memos, Events) by member.

The rest of the functions - Group Members, My groups, Settings, Logout, and Updates - are the same functions as the Cover Story screen functions.

Other Functions on the Story of the Day Screen

The Story of the Day screen also has a date filter function on the bottom of the screen.

Date created / Date Uploaded. You can sort the items on the Story of the Day screen by Date created or Date Uploaded by highlighting and then selecting the Date created / Date Uploaded slider button.

You can also quickly move to the month certain items occurred or were uploaded by selecting a highlighted number on the monthly number bar. You can also select a year, and then a month. When you select a month, Family Story displays the items that were uploaded or occurred in that month

Fitness

→ Fitness

The Fitness application provided by Smart Hub lets you track and manage a fitness and exercise programme you create.

✎ To use Fitness, you should be logged in the Smart Hub.

Read these notes before exercising...

✎ Please warm-up or stretch before exercising.

✎ Stop exercising immediately if you feel pain, or dizzy, exhausted, or short of breath.

Create your profile

When you start Fitness for the first time, you should create your own profile. On the Fitness screen, select Create your profile. A pop-up message appears. Select Create your profile. The Personal Trainer/Create Profile screen appears.

1. To go to next step, press the right arrow button. The Name pop-up appears.
2. Select First Name. The Username screen and keyboard appear. Enter your name. When done, Select OK.
3. Select Last Name. The Username screen and keyboard re- appear. Enter your last name. When done, Select OK.
4. Press the right arrow button on your remote. The Gender pop-up appears.
5. Highlight and select your gender. When you select our gender, you will see a black dot appear in your selection.
6. Press the right arrow button on your remote until the Date pop-up appears.
7. Enter your birthdate using your remote. It will be used to personalize some parameters for you.
8. Press the right arrow button remote. The Units pop-up appears.
9. Select your preferred units. The selected units will be applied throughout the Fitness app. Move to the right again. The Height pop-up appears.
10. Enter your height. This will be used to calculate your body mass index (BMI). Move to the right again. The Weight pop-up appears.
11. Enter your weight. This will be used to calculate your body mass index (BMI). Move to the right again. The application calculates your BMI.
12. The creation of your profile is finished. The product displays your profile information and BMI. To start the Fitness app, select Enjoy Fitness.

Advanced Features

Using Fitness with categories

- Exercise

  Provides information on your exercise goal, current status and recommended contents.

- Progress

  Provide information on your basic body profile, exercise progress, achievement of your goals, etc.

- Edit

  Edit lets you change or adjust your fitness goals.

Selecting Exercise Programs

Fitness displays a number of exercise videos and programs you can use to help you reach your fitness goals. Each of these videos and programs must be downloaded from Samsung Apps. Videos labeled VOD (Video on Demand) are part of a group of free exercise videos. We suggest you download those first.

To download a VOD programme or video, follow these steps;

1. On the Fitness screen, highlight and select a program. A message appears asking you if you want to go to Samsung apps.
2. Select Yes. The Samsung Apps screen appears.

   ✎ This may take a few minutes.
3. If this is the first time you have download a VOD programme or video, you will be directed to download the VOD video app that lets you download and play all the VOD exercise videos.
4. Follow the directions on the screen to download the VOD video app.
5. After the video app has been downloaded, press RETURN several times to go back to the Fitness screen.
6. You can now select and play any of the VOD videos.

   ✎ As you play these videos, Fitness notes the video you are using and calculates the number of calories you have burned, base on the video

Advanced Features

Kids

→ Kids

The Smart Hubs Kids app provides a quick app launcher and a recommended list of kids and education-related applications and contents your kids can start easily and quickly. It also provides management tools that let you control what your kids can view in the app and how long they can watch.

Using Kids with categories

- Playground

  Displays recommended contents and applications. When you select an application or content, the product executes the application or contents immediately.

  ✎ You can add up to 40 items to the recommended list. See "My choice" in this section.

  ✎ You can edit the contents list. For more detailed information, refer to "My choice" in this section.

  ✎ Most of the content must be downloaded from Samsung apps. To download, follow the directions on the screen. When the download is complete, press RETURN repeatedly until the Kids app reappears. Start the contents or app by highlighting and then selecting it.

- Sticker Book

  Displays the Sticker Books with the stickers your kids received. Also, it can be share with your Family Story.

  Your kids can receive the sticker through these methods:

  – **By User (parent)**: You can present a sticker using the Present Stickers function in the Parents menu.

  – **Automatically**: Kids presents a sticker while the child is watching content.

  Creating a Sticker Book

  1. If you want to create a new Sticker Book, select Sticker Book on the top of the screen, and then Create a New Sticker Book at the bottom of the screen. The Create a New Sticker Book screen appears.
  2. Enter the Sticker Book's name using your remote. When done, select Next.
  3. Select a colour for the Sticker Book. When done, select Next.
  4. Check the created sticker book. If you want to change a name, select Edit. If you want to change a colour, select Back.
  5. When done, select Done. A new Sticker Book is created.

  ✎ You can create a new sticker book. Maximum number of books is 10.

  ✎ You can check arrived stickers by highlighting and selecting Get New Stickers. Only ten new sticker types are displayed in New Sticker at one time.

- Browse all

  Displays the kids or education-related applications list and all contents list.

  ✎ When you select an application or contents, if the application or contents has not been installed on the product, the product displays the corresponding download screen from the Samsung Apps screen.

  To use Browse all, follow these steps:

  1. On the Browse all screen, select a character. The contents for that character appears on the right.
  2. Select the kind of contents you want.

     Videos: Displays the video contents of the corresponding character.

     Games: Displays the game contents of the corresponding character.

     Stories: Displays the e-book contents of the corresponding character.
  3. The detailed information screen for the selected contents appears. You can play the contents, share the contents with your Family Story, add the contents to My choice, and give the contents a rating.

     ✎ If you were purchased already, you can play the contents. If you are not purchased, you can download the contents in the Samsung Apps.

- Parents

  Lets you edit the Playground, give stickers to your kids, check a usage time, and set the watching limit alarm.

  My choice

  You can add or delete contents in the Playground. The Playground displays the added contents only.

  To add or delete contents in the Playground, follow these steps:

  1. On the Parents screen, select My choice. The My choice screen appears.

     ✎ My choice contains content you added through the Browse all screen.
  2. Select contents you want to add or delete in the list. A pop-up message appears.
  3. Select Yes.
  4. The selected contents is added or deleted.

  Present Stickers

  When your kids do a good job today, you can present a sticker to them.

To present a sticker to your kids, follow these steps:

1. On the Parents screen, select Present Stickers. The Present Stickers screen appears.
2. Select a sticker you want to present. A pop-up message appears.
3. Select Yes.
4. Select a sticker book you want to put the sticker into, and then select Present.

   ✎ If you want to check a sticker book, select Check Now. You can check the stickers in the selected sticker book.
5. The sticker is placed in the sticker book you selected.

History

Lets you check how long your kids have used the app through a graph. Also, lets yo check how long your kids have used each video or content item. Change a date or content title using your remote.

Set Alarm

Lets you set how long your kids can watch. When the time is up, the alarm window appears.

To set the time your kids can watch, follow these steps:

1. On the Parents screen, select Set Alarm. The Set Alarm screen appears.
2. Select Timer.
3. Select amount of time. The alarm is set.

Web Browser

→ Web Browser

(May not be available, depending on your country.)

Using this function provided by the Smart Hub, you can surf the Internet on your product.

1. On the Smart Hub screen, select Web Browser. The Web Browser screen appears.
2. Surf the Internet in the same way as on a PC.

Using the coloured and function buttons with the Web Browser

- B Control Panel

  Shows or hides the control panel at the top of the screen.

- C Link Browsing / Pointer Browsing

  You can change the cursor to Link Browsing mode or Pointer Browsing mode. In Pointer Browsing mode, you use a pointer to select items on the screen in the same way you use a pointer on a computer. In Link Browsing mode, you move a blue rectangle from link to link on the screen by pressing the directional keys on your remote. Pointer Browsing is best if you have a mouse attached to the product. Link Browsing only works if you are browsing using your remote.

  ✎ When you select Pointer Browsing, you cannot use the remote to select items in the Tools Menu.

  ✎ In Pointer Browsing Mode, you can use the arrow keys on your remote to move the pointer.

- D PIP

  Turns PIP on or off. With PIP on, you can watch product while using the Web Browser.

- Tools

  Displays the Tools menu.

  Control Panel: Shows or hides the control panel in the top of the screen.

  Link Browsing / Pointer Browsing: You can change the cursor to Link Browsing or Pointer Browsing.

  PIP: Turns PIP on or off.

  PIP Settings: Lets you select where the PIP window is displayed on the screen and which sound source the product plays, sound from the main screen (the browser) or sound from the sub screen (the PIP window).

  Add to Bookmark: Add the current page to your Bookmarks.

  Enable Grabbing / Disable Grabbing: You can move a current web page in the direction you choose. To move a web page, select a page, and then move it in the direction you wish using your remote.

  ✎ Available only when the cursor is set to Pointer Mode.

- ◀◀ ▶▶ Scroll up/down

  You can scroll the page up or down.

- Return

  Close the Web Browser.

Advanced Features

Using the Control Panel with Web Browser

The Web Browser has a series of icons across the top of the screen which provide a number of useful functions. With these icons, you can easily use the Web Browser. The icons are described below, starting with the icon on the far left of the screen.

- Back

  Moves to the previous web page.

  ✎ If there is no previous web page, this icon will not work.

- Forward

  Moves to the next web page.

  ✎ If there is no next web page, this icon will not work.

- Refresh / Stop

  Refreshes the current page or stops the current connection from loading.

- Home Page

  Goes to the URL you specified as you're the home page.

- Zoom

  You can select a zoom level of 50%, 75%, 100%, 125%, 150%, 200%, 300% and Fit to screen.

- Bookmarks

  Displays the Bookmarks screen. You can bookmark the current page or select a favourite page to visit from the bookmark list. You can also sort by Date, Name, or Times Visited. To sort, select the Sort. When you select Enter URL, you can enter in a new URL address directly using your remote or mouse and bookmark it.

  When you highlight a bookmark, the Option button appear on the right. In the Option pop-up, you can edit the selected page or delete the selected page from bookmark list.

  Using the Tools menu with Bookmark

  - Delete All

    Delete all bookmark lists.

  - Add to Bookmark

    Bookmarks the current page.

  - Import bookmarks

    You can import a bookmark file saved on another device such as a PC.

  - Export bookmarks

    You can export a bookmark file from your product to another device connected to your product.

- History

  Displays the History screen. You can select a web page to visit in the History list. You can also sort by Date, Name, or Times Visited. To sort, select Sort. When you select Enter URL, you can enter in a new URL address directly using your remote or mouse. When you highlight a page, the Option button appear on the right. In the Option pop-up, you can delete the selected page from the history list or add the selected page to bookmark.

  ✎ If you want to delete all entries in the history lists, open the Tools menu and then select Delete All.

- **URL Field**

  Shows the URL of the current page. If you select the URL field, the URL pop-up appears. Using your remote, you can enter a new URL directly.

- Windows List

  Displays list or images of open windows (the Windows List). You can open new window from list (using Open new window), select and access a window in the list, select and close a window in the list, or close all windows. When you select Enter URL, you can enter a new URL address directly using your remote or mouse. By clicking the Text/Image button in the upper right of the screen, you can toggle the Windows list between text descriptions of open windows and images of the open windows.

  Using the Tools menu with Windows List

  - Open new window

    Open a new web browser window. The new web browser page automatically displays the home page.

  - Close all windows

    Close all the currently opened windows listed in Windows List. After closing all windows, the product opens a new web browser window automatically. The new web browser window automatically displays the home page.

- Search

  Lets you search the web. When you access the Search entry field, the Search screen appears.

  To search the web by word input, follow these steps:

  1. On the Search screen, select the search engine.
  2. Select Enter search keyword.. The keyboard screen appears.
  3. Enter the word you want to use as the keyword using your mouse or remote. The product searches using the keyword and search engine you selected.

- Share

  Share the current web page with your Family Story.

- Options

  You can configure the Web Browser settings.

Configuring the Web Browser Using Options

Move the cursor to the top of the screen, and then select the Options icon.

- Reading Tools

  Provides an easy-to-read page by enlarging the main text. Reading Tools is not available for all pages.

- Approved Sites

  Allows to restrict your children's access to inappropriate web pages. Therefore, this function allows access of only the registered web sites.

  ✎ Every time you access the Approved Sites, the PIN screen appears and you should enter the PIN.

  Approved Sites feature: Turns the Approved Sites function on or off.

  Reset password for Approved Sites.: Change the Approved Sites password.

  Add current site: Lets you add the currently displayed web site to the Approved Sites list.

  Manage Approved Sites: Lets you key in URLs to add to the Approved Sites List and delete sites from the Approved Sites list.

  ✎ If you turn Approved Sites on and have not added any sites to the Approved Sites list, you will not be able to access any Internet sites.

- Private browsing on / Private browsing off

  Enable or disable the Privacy mode. When the Privacy mode is enabled, the browser does not retain the URLs of sites you visit. If you want to enable Privacy mode, select Yes.

  If the Privacy mode function is running, the "Stop" icon appears in front of the URL at the top of the screen. To disable Privacy mode, select it again when Privacy mode is enabled.

- PIP Settings

  Lets you configure the PIP function.

  PIP Position: Select a position for the PIP sub-picture.

  Sound: Select the audio source you will hear - Main or Sub - when PIP is on.

- Web Browser Settings

  You can configure Web Browser options.

  Set as homepage: You can set the home page.

  – Most visited: Set the most frequently visited URL as the home page.

  – Current Page: Sets the current page as the home page.

  – Bookmarks: Sets the bookmarks URL as the home page.

  – Enter URL: Lets you key in the URL of the page you want for your home page. The keyboard works like a cell phone texting keyboard.

  Pop-up block settings: Turns the Pop-up Block on or off.

  Ad Block Settings: You can determine whether to block advertisements and select the URLs for which advertisements are blocked.

  – Ad Blocker: Turns the Ad Blocker on or off.

  – Block current page: Adds the current page to the blocked list.

  – Manage blocked sites: You can add a website for which advertisements will be blocked by directly keying in the URL, or you can delete a website from the list.

  General: You can delete your personal information.

  – Delete history: Deletes the website history.

  – Delete browsing data: Deletes Internet access information such as cookies.

  – Reset Settings: Reset all web browser settings to the factory defaults.

  – Hide Menu: Turns the control panel auto-hide on or off. If you select on, the control panel on the top will be hidden and only appear when you move the pointer to the top of the screen.

  Encoding: You can set the Encoding setting for web pages to Automatic or Manual.

  – Auto select: Turns automatic Encoding for web pages on or off. The browser selects the appropriate encoding format automatically.

  – Settings: Select an encoding format from a list of encoding formats manually. The format is applied to all pages.

  Pointer: You can set the speed of the cursor when the cursor is set to Pointer Mode.

  – Pointer Speed: Select a pointer speed.

  Browser Information: Displays the version and copyright information for the Web Browser.

Advanced Features

[Legal Statement]

Due to the various capabilities of products featuring the Samsung Smart Hub - Content Service, as well as limitations in the available content, certain features, applications, and services may not be available on all devices or in all territories.

Some features on Smart Hub may also require additional peripheral devices or membership fees that are sold separately. Please visit http://www.samsung.com for more information on specific device information and content availability. The services and availability of content through Smart Hub are subject to change from time to time without prior notice.

Advanced Features

AllShare Play

→ AllShare Play

View or play photos, music, and movie files located on a USB Mass Storage Class (MSC) device, a PC, or a DLNA device (a cell phone, for example) on your product.

✎ To view content on a USB device, you must plug the device into a USB port on the product.

✎ If you want to use a USB HDD, we recommend using a USB HDD that has a power adapter.

✎ To play content located on your PC or on a DLNA compatible cell phone, you must connect your PC and the product to your network and download and install the AllShare network software on your PC. In additon, to play content located on a DLNA compatible device, you must have a wireless network.

Connecting a USB Device

1. Turn on your product.
2. Connect a USB device containing photo, music and/or movie files to the USB port on the product.
3. When a USB device is connected to the product, the New device connected. window appears. Select a category you want to play among Videos, Photos and Music.

✎ The product may display the files on the USB device automatically if it is the only device connected.

Disconnecting a USB Device

Method 1: Using the SOURCE button.

1. Press the SOURCE button.
2. Select a desired USB device, and then press the TOOLS button. The Tools menu appears.
3. Select Safely Remove USB Device, and then wait until the selected USB device is disconnected. You can remove a USB device from the product.

Method 2: Using the AllShare Play home screen.

1. Go to AllShare Play home screen. (→ AllShare Play)
2. Select any category except My list, and then press the button.
3. Select a desired USB device, and then press the TOOLS button. The Tools menu appears.
4. Select Safely Remove USB Device, and then wait until the selected USB device is disconnected. You can remove a USB device from the product.

✎ To remove a USB device from the product, we recommend use Safely Remove USB Device function.

Advanced Features

Read this information before using AllShare Play with a USB device.

Restriction and Caution

- Before connecting your device to the product, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.
- Connect a USB HDD to the dedicated USB (HDD 5V 1A) port.
- Do not disconnect a USB device while it is being read by the product.
- If you connect a USB device with a USB extension cable, the product may not recognize the USB device or read the files on the device.
- If a USB device you connect to the product is not recognized, the files on the device are corrupted, or a file in the list is not played, connect the USB device to a PC, format the device, re-copy the files to the device, and then try playing again.
- If a file you deleted from the PC is still found when you run Smart Hub, use the “Empty the Recycle Bin” function on the PC to permanently delete the file.
- If your PC cannot construct a functional database of saved files on a USB device because there is no free space on the USB device, you may not be able to view any new files you have added, even though you have saved these files to the USB device.

Supported Devices

- Certain types of USB Digital camera and audio devices may not be compatible with this product.
- AllShare Play supports only USB Mass Storage Class (MSC) devices. MSC is a Mass Storage Class Bulk-Only Transport device. Examples of MSC include Thumb drives, Flash Card Readers and USB HDD (USB HUB are not supported). Devices should be connected directly to the product’s USB port.
- More than 3TB USB HDD is not supported.
- If more than 2 PTP (Picture Transfer Protocol) devices are connected, you can only use one at a time.
- If more than two MSC devices are connected, some of the devices may not be recognized.
- A USB device that requires high power (more than 500mA or 5V) may not be supported.
- If the product has no input during the time set in Auto Protection Time, the Screensaver will run.
- The power-saving mode of some external hard disk drives may be released automatically when you connect them to the product.

File system and formats

- The USB function might not work properly with unlicenced multimedia files.
- MTP (Media Transfer Protocol) is not supported.
- The file system supports FAT16, FAT32 and NTFS.
- AllShare Play supports only the Sequential jpeg format. It does not support the Progressive jpeg format.
- The higher the resolution of the image, the longer it takes to display on the screen.
- The maximum supported JPEG resolution is 15360 X 8640 pixels.
- If a file is corrupted or the product does not support the file type, the Not Supported File Format. message appears.
- If the files are sorted by Folder view, the product can display the names of up to 1000 files in each folder.
- If the number of files and folders saved on a USB storage device is over approximately 8000, some files and folders may not appear and some folders may not be unopenable.
- The product cannot play MP3 files with DRM that have been downloaded from a for pay site. Digital Rights Management (DRM) is a technology that supports the creation, distribution, and management of digital content in an integrated and comprehensive way, including protecting the rights and interests of content providers, preventing illegal copying of contents, and managing billings and settlements.
- Even if a file you want to play is encoded in a supported format, an error message may appear due to a sub container or profile problem.

Connecting to a PC through a network

You can play pictures, music, and videos located on your PC through a network connection using AllShare Play.

✎ For more information on how to configure your product and connect it to your network, refer to “Setting up the Network” in this manual.

✎ To view content located on your PC, you must have connected your product and your PC to your LAN and downloaded and installed AllShare Play PC Software on your PC.

✎ We recommend you locate both your product and PC in the same network subnet. IP addresses have four parts, separated by periods (111.222.333.444). If your product and PC are in the same subnet, the first 3 parts of the product IP address and the PC IP address (111.222.333) will be the same and only the last part (the host address) will be different.

Advanced Features

The following AllShare Play functions are not supported when you are playing media from a PC connected through a network:

✎ The Background Music and Background Music Setting functions.

✎ Sorting files by preference in the Photos, Music, and Videos folders.

– The ◀◀ (REW) or ▶▶ (FF) function while a movie is playing.

✎ DivX DRM is not supported.

✎ Set your PC firewall programme so that AllShare Play PC Software is a permitted programme.

✎ Depending on the Internet server, when you use AllShare Play through a network connection:

– The sorting method may vary.

– The Scene Search function may not be supported.

– The Resume function, which resumes playing of a video, may not be supported.

– The Resume function does not support multiple users. (It memorizes only the point where the most recent user stopped playing a video.)

– The search function may not work depending on the content information.

✎ You may experience file stuttering while playing a video in AllShare Play through a network connection.

My list (In AllShare Play)

→ AllShare Play → My list

Using this function, you can access content easily and quickly.

- Recently played

  Displays the videos, photos or music file list of recently played. If you have a file you want to play again, use this category.

  ✎ When you play a file from the Recently played list, and the USB device is not connected or the file is not found, the "Unable to find the file." message appears.

  ✎ The Recently played list can have up to 48 files. The files are arranged so that the most currently played files are at the top of the list.

  ✎ Recently played files located on a mobile phone may not play.

- What's new

  Displays newly saved videos, photo, or music files on a connected USB device or your PC. If you have a newly updated file you want to play, use this category.

- Playlist

  Displays the Playlist files saved on the USB device or your PC. If you want to play a playlist, select the playlist. The selected playlist plays immediately.

  ✎ You can create up to 12 playlists.

  ✎ You can add up to 100 files to a single playlist.

  ✎ You can only add one type of content to a single playlist. For example, you can only add music files to a playlist that includes music files.

Creating the Playlist

1. On the AllShare Play main screen, select Videos, Photos, or Music on the left side of the screen.
2. On the right side of the screen, highlight and select the device that has the files you want in the playlist. AllShare Play displays the folders and/or files on the device.
3. If AllShare Play is displaying folders, highlight and select the folder that contains the files you want. If it is only displaying files, go to Step 4.
4. Hiighlight a file, and then open the Tools menu using your remote,
5. Highlight and select Add to Playlist.
6. Highlight and select a file you want to add. The ✓ mark appears in the check box.
7. Repeat Step 6 to select additional files.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.
8. When done, select Add. The Add to Playlist screen appears.
9. Select Create new. The Create a new playlist. screen appears.
10. Enter playlist name using your remote or accept the default name.
11. When finished, Select Done. The new playlist is created. The Added pop-up appears.
12. Select Play to play now or OK to play later.

To add files a playlist, follow these steps:

1. On the AllShare Play main screen, select Videos, Photos, or Music on the left side of the screen.

   ✎ You must select the kind of content that is already in the playlist. For example, if you want to add files to a music playlist, you must select Music.

2. On the right side of the screen, highlight and select the device that has the files you want in the playlist. AllShare Play displays the folders and/or files on the device.
3. If AllShare Play is displaying folders, highlight and select the folder that contains the files you want. If it is only displaying files, go to Step 4.
4. Hiighlight a file, and then open the Tools menu using your remote,
5. Highlight and select Add to Playlist.
6. Highlight and select a file you want to add. The ✓ mark appears in the check box.
7. Repeat Step 6 to select additional files.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.

8. When done, select Add. The Add to Playlist screen appears.
9. Highlight and select the playlist you want to add the files to. The Added pop-up appears.
10. Select Play to play now or OK to play later.

To delete one or more files in the Playlist, follow these steps:

1. On the AllShare Play main screen, select My list.
2. In the Playlist area at the bottom of the screen, highlight the playlist you want to edit.
3. Open the Tools menu using your remote, and then select Edit playlist. The Edit playlist screen appears.
4. Select a file you want to delete. The ✓ mark appears in the check box.
5. Repeat Step 5 to select additional files.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.

6. When done, select Remove. A pop-up message appears.
7. Select Yes. The selected file(s) has been removed from the playlist

Videos (In AllShare Play)

→ AllShare Play → Videos

You can play video files saved on USB device and/or your PC.

✎ For more information about the subtitle formats and codec formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

Playing a Video

1. On the AllShare Play screen, select Videos.
2. Highlight and select the device you want to play.
3. If AllShare Play displays folders, highlight and select the folder that contains the file you want, then go to Step 4. If AllShare Play displays files only, go directly to Step 4.
4. Highlight and select the desired video on the file list screen.

✎ If you stop the video while it is playing, you can play the video later from the point where you stopped it.

✎ The file name appears on the top of the screen with the video's playing time.

✎ If video time information is unknown, the playing time and progress bar are not displayed.

Video playback control buttons

- ◀◀, ▶▶

  Each time you select ◀◀ or ▶▶ using your remote, the playback speed change as follows. (◀◀ 1 / ◀◀ 2 / ◀◀ 3 / ▶▶ 1 / ▶▶ 2 / ▶▶ 3)

- ◀, ▶

  Jump to backward or forward from current position.

- ❚❚

  Pause the scene.

  – For Slow Motion: In pause mode, select ▶▶. Each time you select ▶▶ using your remote, the playback speed is reduced in this order ▶ 1/8 / ▶1/4 / ▶1/2. The playback speed is displayed in the upper left corner.

  – For Step Mode: In pause mode, select ❚❚. Each time you select ❚❚ using your remote, a new frame will be appear.

  ✎ To return to normal speed playback, select ▶ using your remote.

  ✎ The product does not play sound in Step mode or Slow Motion.

  ✎ Slow Motion and Step Mode operate only in the forward direction.

Using the Tools menu with Videos

- On the file list screen, you can use the following these options:
  - View

    Lets you sort the file list by one of four sort criteria.
  - Play selection

    Lets you select one or more files to play immediately.
  - Send

    Lets you send your video files with your Family Story account or to other devices.

    ✎ If you want to use this function, you must log in to Smart Hub.
  - Login / Logout

    You can login to or logout of your Samsung Account.
  - Add to Playlist

    Lets you create playlists. When you create playlists, you can play a series of videos that you want to watch easily and quickly.
  - Go to playlist

    Moves to the Playlist screen.
  - Information

    Displays detailed information about the selected file.
- During playback, you can use the following options on the Tools menu:
  - Go to Videos List

    Stops the video and takes you to the file list screen.
  - Play from the beginning

    You can restart a video file from the beginning.
  - Scene Search

    You can use the Scene Search function during playback to view or start a movie from the scene of your choice.

    ✎ If the index information in the file damaged or the file does not support indexing, you will not be able to use the Scene Search function.
  - Title Search

    You can search the video using the left and right arrow keys or input a playing time directly using your remote.
  - Time Search

    Search the video or input the play time directly using your remote.
  - Repeat Mode

    You can play a single movie file or all the files on the play list screen repeatedly.
  - Picture Size

    You can adjust the picture size to your preference.

– Picture Mode

  Lets you change the Picture Mode.

– Sound Mode

  You can change the Sound Mode.

– Audio Language

  You can listen to the video in one of supported languages. The function is enabled only when you play stream-type files which support multiple audio formats.

– Subtitle

  Lets you view with language subtitles. You can select a specific language if the subtitle file contains multiple languages.

– Subtitle Settings

  Displays the Subtitle Settings. You can select subtitle options such as colour and transparency.

– Information

  Displays detailed information about the selected file.

✎ The functions available on the Tools menu at one time depend on the characteristics of the video you are playing. All functions are not necessarily available for all videos.

Using the View function with Video Files

✎ When you use the AllShare Play function with Family Story, Facebook or Picasa rather than a USB device, View is not supported.

1. To sort files in the file lists, select D using your remote. The View screen appears.
2. Select sort criteria.

- Folder view

  Displays the folders on the device in alphabetical order. To view the file names and thumbnails, select a folder.

- Title

  Sorts and displays the files by title in Symbol / Number / Alphabet / Special order.

- Latest Date

  Sorts and displays files by the latest create date.

- Earliest Date

  Sorts and displays files by the earliest create date.

Send your video files

Lets you send your video files with your Family Story or send files to other devices.

✎ To use Send, you must be logged in to Smart Hub.

An example: Sending with your Family Story

1. Highlight a file, open the Tools menu using your remote, and then select Send.
2. Select a video file you want to send. A ✓ mark appears in the check box on the left.
3. Repeat Step 2 to select additional videos.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.
4. When done, select Send. The Send screen appears.
5. Choose the destination device to send to.
6. Choose the family group to share with. A pop-up window appears.
7. Enter a message to send to the family group you selected.

   ✎ If the QWERTY keyboard screen is displayed, you can use a keyboard connected to the product to enter the message.
8. When done, select Send.

Photos (In AllShare Play)

→ AllShare Play → Photos

Viewing a Photo (or slide show)

✎ For more information about the supported image file formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

1. On the AllShare Play screen, select Photos.
2. On the right side of the screen, select the device that has the photos you want to view.
3. If AllShare Play displays folders, select the folder that contains the photos you want, then go to Step
4. If AllShare Play displays photo thumnails, go directly to Step 4.
5. To start a slide show, select ► using your remote.

   ✎ To view another photo manually, press the ◄ or ► button.

   ✎ During the slide show, all files in the file list are displayed in order, starting from the file you selected.

   ✎ When viewing a photo file or slide show, you can add background music if you have music files on same device.

   ✎ If you select the wrong background music, you cannot change the music until the BGM (Background music) has finished loading.

Photo playback control buttons

- ◄◄ / ►►

  The slide show speed change as follow (Slow, Normal, Fast). The speed is displayed in the upper right of the screen.

- ◄, ►

  Go to the previous or next photo.

- ■

  Return to the file list screen.

- ►

  Start the slide show.

- II

  Pause the slide show.

Using the Tools menu with Photos

- To use the Tools menu with photos, you must first highlight a photo file on the file list screen. After you have highlighted a photo on the file list screen, you can use the following options in the Tools menu:

– View

Lets you sort the file list by one of four sort criteria.

– Play selection

Lets you select one or more files to play immediately.

– Send

Lets you send your photos with your Family Story account or photo-related application.

✎ To use Send, you must be logged in to Smart Hub.

– Login / Logout

You can login to or logout of your Smart Hub account.

– Add to Playlist

Lets you create playlists. When you create playlists, you can play a series of photos easily and quickly.

– Go to playlist

Moves to the Playlist screen.

– Information

Displays detailed information about the selected file.

- When playing a photo file, you can use the following options:

– Go to Photos List

Moves to the file list screen.

– Start Slide Show / Stop Slide Show

Alternatively, select ► to start a slide show or ❚❚ to stop a slide show using your remote.

– Slide Show Speed

You can select the slide show speed during the slide show. Alternatively, select ◄◄ or ►► using your remote.

– Slide Show Effect

You can set various slide show effects.

– Background Music On / Background Music Off

You can turn on or turn off background music.

– Background Music Setting

  You can set and select background music when watching a photo file or slide show.

– Picture Mode

  You can change the Picture Mode.

– Sound Mode

  You can change the Sound Mode.

  ✎ Available only when Background Music is set to on.

– Zoom

  You can zoom into images in full screen mode.

– Rotate

  You can rotate images.

– Information

  Displays detailed information about the selected file.

Using the View function with Photo Files

✎ When you use the AllShare Play function with Family Story, Facebook or Picasa rather than a USB device, View is not supported.

1. To sort files in the file lists, select D using your remote. The View screen appears.
2. Select sort criteria.

- Folder view

  Displays the folders on the device in alphabetical order. To view the file names and thumbnails, select a folder.

- Title

  Sorts and displays the files by title in Symbol / Number / Alphabet / Special order.

- Latest Date

  Sorts and displays files by the latest create date.

- Earliest Date

  Sorts and displays files by the earliest create date.

- Monthly

  Sorts and shows photo files by month.

Advanced Features

Send your photos

Lets you send your photos with your Family Story account or to other devices

✎ To use Send, you must be logged in to Smart Hub.

1. For example, suppose that you want to send with your Family Story.
2. To send photo files in the file list, highlight a file, open the Tools menu using your remote, and then select Send.
3. Select a photo file you want to send. A ✓ mark appears in the check box on the left.
4. Repeat Step 3 to select additional tracks.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.
5. When done, select Send. The Send screen appears.
6. Choose the destination device to send to.
7. Choose the family group to share with. A pop-up window appears.
8. Enter a message to send to the family group you selected.

   ✎ In the QWERTY keyboard screen is displayed, you can use a keyboard connected to the product to enter the message.
9. When done, select Send.

Music (In AllShare Play)

→ AllShare Play → Music

Playing Music

✎ For more information about the supported music file formats, refer to "Supported Subtitle and AllShare Play file formats" in the Other Information section.

1. On the AllShare Play screen, press the arrow button to select Music.
2. Select the device that contains the files you want to play.
3. If AllShare Play displays folders, highlight and select the folder that contains the music files you want, then go to Step 4. If AllShare displays only files, go directly to Step 4.
4. Select the desired music file in the file list or select ► using your remote.

   ✎ To move to a previous page, select ◄◄ using your remote. To move to the next page, select ►► using your remote.

   ✎ When the music is playing, you can fast forward or fast rewind the music file by selecting ◄◄ or ►► using your remote.

✎ If the sound is abnormal when you play MP3 files, adjust the Equaliser in the Sound menu. (An over modulated MP3 file may cause a sound problem.)

Music playback control buttons

During playback, you can use additional functions at the bottom right of the screen.

- Play / Pause

  You can start or pause a music file. Alternatively, you can select ► or ❚❚ using your remote.

- Repeat Mode

  You can play one or all the music files shown in the file list repeatedly.

- Shuffle Mode

  You can play the music files sequentially or randomly.

- Sound Mode

  You can change the Sound Mode.

Using the Tools menu with Music

- To use the Tools menu with Music, you must first highlight a music file on the file list screen. After you have highlighted a music file on the file list screen, you can use the following options in the Tools menu:
  - View

    You can sort the file list by one of four sort criteria.
  - Play selection

    Lets you select one or more files to play immediately.
  - Go to playlist

    Moves to the Playlist screen.
  - Information

    Displays detailed information about the selected file.

Using Play selection with music files

1. Highlight a music file in the file list.
2. Open the Tools menu using your remote, and then select Play selection.
3. Select the track you want to add. A ✓ mark appears in the check box on the left.
4. Repeat Step 3 to select additional tracks.

   ✎ To select all the files in the list, select Select All. To cancel a selection, select the file again.
5. Select Play. The selected music files play.

Using View with Music files

✎ When you use the AllShare Play function with Family Story, Facebook or Picasa rather than a USB device, View is not supported.

1. To sort files in the file lists, select D using your remote. The View screen appears.
2. Select sort criteria you want.

- Folder view

  Displays the folders on the device in alphabetical order. To view the file names and thumbnails, select a folder.

- Title

  Sorts and displays the files by title in Symbol / Number / Alphabet / Special order.

- Artist

  Sorts the music files by artist in alphabetical order.

- Album

  Sorts the music files by album in alphabetical order.

- Genre

  Sorts the music files by the genre.

Recorded TV product (In AllShare Play)

→ AllShare Play → Recorded TV

To use the recording or Timeshift function, the connected USB device must be available for recording. Device format is recommended to use USB HDD.

✎ During the Device formatting, do not disconnect the device while formatting is in progress. If you format the device, all files will be deleted.

✎ Before formatting your device to the product, please back up your files to prevent them from damage or loss of data. SAMSUNG is not responsible for any data file damage or data loss.

To record a current broadcasting programme

Allows you to record a programme currently being broadcasted.

Set the current time first to use this function.

1. When you record a broadcast programme, select ● using your remote. A pop up window will appear.

   ✎ We recommend using a USB HDD with at least 5,400 rpm, but a USB HDD of RAID type is not supported.

   ✎ A USB storage device cannot record until it completes the Device Performance Test.

   ✎ The file systems of the PVR output (Personal Video Recorder) and the Camera app are different. Therefore, you cannot save both output types on the same USB device. To make a recording using the PVR and the Camara app, you have to save the recordings using different USB ports.

2. Select Length to set up the recording time, and then select OK.

Playing Recorded TV product Programme

1. On the AllShare Play screen, select Recorded TV.
2. Highlight and select the device you want to play.
3. Select the desired recorded product file in the file list.

   ✎ To move a previous page, select ◄◄ using your remote. To move a next page, select ►►.
4. Select ►.

- The selected file is displayed on the top with its playing time.

Advanced Features

Playback control button with Recorded TV

- ◀◀, ▶▶

  Each time you select ◀◀ or ▶▶ using your remote, the playback speed change as follows. (◀◀ 1 / ◀◀ 2 / ◀◀ 3 / ◀◀ 4 / ◀◀ 5 / ◀◀ 6 / ◀◀ 7 / ▶▶ 1 / ▶▶ 2 / ▶▶ 3 / ▶▶ 4 / ▶▶ 5 / ▶▶ 6 / ▶▶ 7)

- ◀, ▶

  Jump to backward or forward from current position.

- ❚❚ button

  Pause the scene.

  – For Slow Motion: In pause mode, select ▶▶ using your remote. Each time select ▶▶ using your remote, the playback speed is reduced in this order ▶1/8 / ▶1/4 / ▶1/2. The playback speed is displayed in the upper left corner.

  – For Step Mode: In pause mode, select ❚❚ using your remote. Each time the ❚❚ function is selected, a new frame will be appear.

    ✎ To return to normal speed playback, select ▶ using your remote.

    ✎ The product does not play sound in Step mode or Slow Motion.

    ✎ Slow Motion and Step Mode operate only in the forward direction.

Using the Tools menu with Recorded TV

- On the file list screen, you can use the following these options:

  – Play Current Group

    Will play the contents of the selected groups.

  – View

    Lets you sort the file list by one of four sort criteria.

  – Play selection

    Lets you select one or more files to play immediately.

  – Delete

    Deletes the file from the list.

  – Add to Playlist

    Lets you create playlists. When you create playlists, you can play a series of videos that you want to watch easily and quickly.

  – Go to playlist

    Moves to the Playlist screen.

- Lock/Unlock

  To enable or disable the lock.

- Device Management

  On the device can scan and format.

- The following functions are available only in selected content item.
  - Rename

    Change the name of the content.

  - Information

    Displays detailed information about the selected file.

- During playback, you can use the following options on the Tools menu:
  - Go to Recorded List

    Stops the video and takes you to the file list screen.

  - Play from the beginning

    You can restart a video file from the beginning.

  - Title Search

    You can search the video using the left and right arrow keys or input a playing time directly using your remote.

  - Time Search

    Search the video or input the play time directly using your remote.

  - Repeat Mode

    You can play a single movie file or all the files on the play list screen repeatedly.

  - Picture Size

    Lets you adjust the picture size to your preference.

  - Picture Mode

    You can change the Picture Mode.

  - Sound Mode

    You can change the Sound Mode.

  - Information

    Displays detailed information about the selected file.

Advanced Features

Timeshift

Using the Timeshift function

If you missed a live broadcast, you can see from the recorded broadcast using this feature.

1. When you watch a broadcast programme, select ► using your remote to start the Timeshift function.
2. If you want to stop the Timeshift function, select ■ using your remote.

   ✎ The Timeshift mode operates for a maximum of 90 minutes.

   ✎ The Timeshift function is not supported for analogue channels.

   ✎ The Timeshift functions are disabled for channels locked with Channel Lock.

Before using the Timeshift and a record function...

Recorded videos are DRM (digital rights management) protected and cannot be played on a PC or other products. Note that files saved on the product cannot be used after the main board is changed.

NOTE

- We recommend using a USB HDD with at least 5,400 rpm, but a USB HDD of RAID type is not supported.
- The availability of both recording and the Timeshift function may differ depending on picture quality and the free space on the hard disk drive.
- USB memory stick is not compatible.
- When the Timeshift is used to the gunwales, the pause may be cancelled.
- When recording is performed by both the PVR (Personal Video Recorder) function and a device that supports the HDMI-CEC feature, recording by the PVR function takes precedence.
- If the USB device has failed the Device Performance Test, the USB device must go through the Device Format and Device Performance Test again before you record with the Guide or Channel.
- The Timeshift functions can only be used with a USB storage device that completed the Device Performance Test.
- If you attempt the recording or Timeshift function with a device that did not have the Device Performance Test, the function will not start.
- If any function that turns off the product (Sleep Timer, Off Timer, etc.) is set for a time that conflicts with recording, the product will be turned off once the recording is complete.

- For the Timeshift operation, the USB device requires 1.5GB of free space.
- The Schedule Recording function requires 100MB of free space on the USB device.
- If the free space of the USB device decreases to less than 50MB while a Schedule Recording is operating, the Schedule Recording function is automatically terminated.
- When both the Schedule Recording and Timeshift functions are running, and the free space on the USB device decreases to less than 500MB, only the Schedule Recording function is automatically terminated.
- The Timeshift function continues even after changing the digital channel and users can watch past programs using the saved Timeshift data.
- If the product enters a state where the Timeshift function is not supported (application execution, input signal switching, analogue channel change, etc.), the Timeshift data are not saved.
- If the product enters a state where the Timeshift function is not supported (application execution, input signal switching, analogue channel change, etc.) while the Timeshift function is running, it is automatically terminated without an additional message being displayed.
- If a user tunes to a digital channel, the suspended Timeshift function resumes automatically.

Using the DLNA Function

→ AllShare Play

You can play media contents including videos, photos, and music saved on your mobile phones or the other devices (such as your PC) by controlling them on the product via the network.

For more information, visit “www.samsung.com” or contact the Samsung call centre. Mobile devices may need additional software installation. For details, refer to each device’s user’s guide.

✎ If your Samsung product connects to a non-Samsung DLNA server, a compatibility issue may occur during video playback.

✎ By connecting your Samsung product to a network via AllShare Play, you can use Samsung’s original functions as follows:

- Playback of various video formats (DivX, MP4, 3GP, AVI, ASF, MKV, etc.)
- Video thumbnail feature
- Bookmark function (to resume video playback)
- Auto-chaptering (scene navigation)
- Digital content management
- Compatibility with various subtitle formats (SRT, SMI, SUB, TXT, TTXT)
- Search with file names
- And many others

✎ To use the original DLNA functions of Samsung fully, it is recommended that you use the AllShare Play software provided in your product.

AllShare Settings

Menu → Network → AllShare Settings

Shows a list of mobile phones or connected devices which have been set up to use AllShare Settings with this product.

✎ The AllShare Settings function is available in all devices which support DLNA DMC.

- Allowed / Denied: Allows / Blocks the devices.
- Delete: Deletes the devices from the list.

  ✎ This function only deletes the name of the device from the list. If the deleted device is turned on or tries to connect to the product, it may appear on the list again.

To play the media contents of the devices connected to DLNA function, follow these steps:

1. On the AllShare Play screen, select the kind of content you want to play: Videos, Photos, Music.
2. On the right side of the screen, select DLNA. The product displays the list of devices connected using the DLNA function.
3. Select a device. AllShare Play displays the accessible files or folders on the device.
4. Select a file in the file list. The selected file will play.

Playing media contents saved on DLNA devices

1. Connect the mobile phone or other devices which support AllShare Play function.
2. Play media contents on the device. A popup screen appears on the bottom of your product.
3. Select Allow to accept the connected device. The media contents of the device can now play on your product.

   ✎ You can find the allowed devices on AllShare Settings.

✎ An alarm window appears informing you that media contents (videos, photos, music) sent from a mobile phone will be displayed on your product. The contents are played automatically 3 seconds after the alarm window appears.

– If you close the alarm window using your remote when the alarm window appears, the media contents are not played.

✎ The first time a device accesses your product through the media function, a warning pop up window appears. Select Allow. This permits the phone to access the product freely and use the Media function to play content.

✎ To turn off media contents transmissions from a mobile phone, set the device to Denied in the AllShare Settings.

✎ Contents may not play on your product depending on their resolution and format.

✎ Some buttons may not work depending on the type of media content.

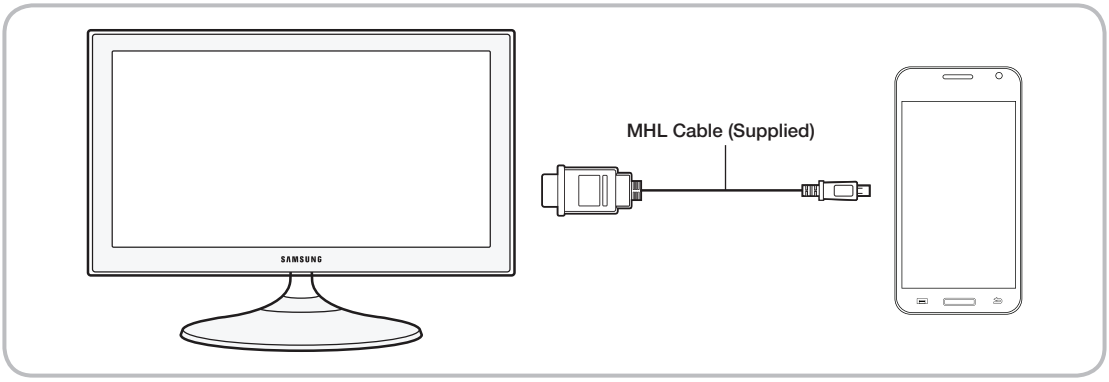
✎ Using the mobile device, you can control the media play. For details, refer to each device's user's guide

Advanced Features

Using the MHL function

You can enjoy videos, photos and music files on your product when connecting it with a mobile device that supports Mobile High-Definition Link (MHL) function.

✎ To use the MHL function, you need an MHL-certified mobile device. You can check if your mobile device is MHL certified on the device manufacturer's website. To find a list of MHL-certified devices, visit the official MHL website (http://www.mhlconsortium.org).



To use the MHL function, follow these steps:

1. With an MHL cable, connect the USB port of the mobile device and the **HDMI IN 2 (MHL /ARC)** port of the product.

   ✎ You can also connect the HDTV adapter.

2. Select Source using your remote. The Source screen appears.
3. Select HDMI2.
4. Play the file.

✎ To use the MHL function, you must upgrade the software to the latest version.

✎ When you use an MHL cable, only the HDMI IN 2 (MHL /ARC) port of the product supports the MHL function.

✎ This product is officially MHL-certified. If you encounter any problem when using the MHL function, please contact the manufacturer of the mobile device.

✎ Some mobile devices (products) may not support the function depending on the performance or the function of the device.

✎ Since the product screen is wider than the mobile device screen, the visual quality may seem degraded.

✎ When you use an MHL-dedicated cable, you can charge the connected mobile device even if the product is in standby state.

✎ The product remote control supports the following buttons:

▲ / ▼ / ◀ / ▶ (Menu navigation)

◀◀ (REW), ▶▶ (FF), ↵ (select)

▶ (play), ❚❚ (pause), ■ (stop)

↩ (Move to previous menu)

✎ For detailed troubleshooting information about MHL function, refer to the "Troubleshooting" chapter (Other Information → Troubleshooting → MHL Connection) in this manual (page 164).

Anynet+ (HDMI-CEC)

Menu → System → Anynet+ (HDMI-CEC)

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote. The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

✎ You can only control Anynet+ devices using the TV's remote control, not the buttons on the product.

✎ The product remote control may not work under certain conditions. If this occurs, reselect the Anynet+ device.

✎ The Anynet+ functions do not operate with other manufacturers' products.

✎ For instructions explaining how to connect Anynet+ external devices, refer to the device's user manual. You must connect an Anynet+ device using an HDMI cable. Some HDMI cables may not support Anynet+ functions.

✎ Anynet+ works when the AV device supporting Anynet+ is in the standby or on status.

✎ Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

✎ However, you can connect only one Anynet+ Home Theatre. To connect an Anynet+ Home Theatre, connect the Home Theatre to the product using an HDMI cable then:

- To hear sound from the Home Theatre's front, left and right speakers and the subwoofer only, connect a digital optical cable between the **DIGITAL AUDIO OUT (OPTICAL)** port on your product and the Digital Audio Input on the Home Theatre.
- To hear 5.1 channel audio, connect HDMI cables to your Anynet+ DVD player, satellite box, etc. Then, connect the **DIGITAL AUDIO OUT (OPTICAL)** port on your DVD player, Satellite Box, etc. (i.e. Anynet+ Device 1 or 2) directly to the Home Theatre, not the product.

Anynet+ (HDMI-CEC) Menu

The Anynet+ menu changes depending on the type and status of the Anynet+ devices connected to the product.

- View TV

  Change from Anynet+ mode to product broadcast mode.

- Device List

  Shows the Anynet+ device list.

- (device_name) Menu

  Shows the menu of the connected device. E.g. if a DVD player is connected, the disc menu of the DVD player will appear.

- (device_name) Tools

  Shows the Tools menu of the connected device. E.g. if a DVD player is connected, the Tools menu of the DVD player will appear.

  ✎ Depending on the device, this menu may not be available.

- (device_name) Title Menu

  Shows the title menu of the disc in the connected device. E.g. If a DVD player is connected, the title menu of the movie in the DVD player will appear.

  ✎ Depending on the device, this menu may not be available.

- Receiver

  Sound is played through the receiver.

Setting up Anynet+ (HDMI-CEC)

- Anynet+ (HDMI-CEC)

  To use the Anynet+ Function, Anynet+ (HDMI-CEC) must be set to On.

  ✎ When the Anynet+ (HDMI-CEC) function is disabled, all the Anynet+ related operations are deactivated

- Auto Turn Off

  Set an Anynet+ Device to turn off automatically when the product is turned off.

  ✎ If Auto Turn Off is set to Yes, running external devices will turn off at the same time as the product powers off.

  ✎ May not be enabled depending on the device.

- Receiver

  You can listen to sound through a receiver (i.e. Home Theatre) instead of the product Speaker.

Advanced Features

Switching between Anynet+ Devices

1. Open the Tools menu using your remote, and then select Anynet+ (HDMI-CEC).
2. Select Device List. The Device List screen appears.

   ✎ If you cannot find a device you want, select Refresh to refresh the list.
3. Select a device, and then wait until the switch to the selected device is completed.

   ✎ The Device List menu appears only when you set Anynet+ (HDMI-CEC) to On in the System menu.

   ✎ Switching to the selected device may take up to 2 minutes. You cannot cancel the switching operation while switching is in progress.

   ✎ If you have selected an Anynet+ device using the Source function , you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device using the Device List function.

Listening through a Receiver

You can listen to sound through a receiver (i.e. Home Theatre) instead of the product Speaker. To listen to sound through a receiver, go to Receiver screen (System → Anynet+ (HDMI-CEC) → Receiver). Then select Receiver and set to On.

✎ If your receiver supports audio only, it may not appear in the device list.

✎ The receiver will work when you have properly connected the optical in jack of the receiver to the **DIGITAL AUDIO OUT (OPTICAL)** port of the product.

✎ When the receiver (i.e. Home Theatre) is set to on, you can hear sound output from the product's Optical jack. When the product is displaying a DTV (air) signal, the product will send out 5.1 channel sound to the receiver. When the source is a digital component such as a DVD player and it is connected to the product via HDMI, you will hear only 2 channel sounds from the receiver.

Using the ARC function

You can listen to sound from the product through a receiver connected using an HDMI cable without connecting a separate optical cable. To listen to sound through a receiver using the ARC function, go to Receiver screen (System → Anynet+ (HDMI-CEC) → Receiver). Then select Receiver and set to On.

✎ To use the ARC function, a receiver which supports the HDMI-CEC and ARC features must be connected to the **HDMI IN 2 (MHL / ARC)** port.

✎ To disable the ARC function, set the Receiver to Off. Even if the product transmits the ARC signal continuously, the receiver will be blocked from receiving the signal.

Other Information

Troubleshooting

If the product seems to have a problem, first review this list of possible problems and solution. If none of the troubleshooting tips apply, visit www.samsung.com

Issues	Solutions and Explanations
Flickering and Dimming	If your Samsung Television is flickering or dimming sporadically, you may need to disable some of its energy efficient features such as the Energy Saving feature. Follow the steps below with your remote to turn these features off or on. • Energy Saving: Menu → System → Eco Solution → Energy Saving
Component Connections / Screen Colour	If you find that the colour on your Samsung television's screen is not correct or black and white, first run a Self Diagnosis on the product to make sure there are no device issues. • Self Diagnosis: Menu → Support → Self Diagnosis → Picture Test If the problem does not appear in the Picture test, make sure: • Your connections are all consistent. For example, if you've used the AV In jack on your product, make sure you have used the AV Out jack on your video source. • You have connected to your devices to the correct jacks. For example, if you use the Component jacks, labeled Pb, Pr, and Y, to connect your product and video source, make sure you have connected the blue Pb jack on the video source to the blue Pb jack on the product, the red Pr jack on the source to the red Pr jack on the product.
Screen Brightness	If you find that the colours on your Samsung product are correct but just a little too dark or bright, try adjusting the following settings in the Picture option in the Main menu: • Backlight, Contrast, Brightness, Sharpness, Colour, Tint (G/R) and so on. Go in to "Picture" on user Menu then try adjusting options mentioned above.
Unwanted Powering Off	If your Samsung product appears to turn off by itself, there may be an issue with either your Timer settings or your Eco friendly No Signal Power Off feature. First make sure Sleep Timer is not accidentally set. The Sleep Timer turns off the product automatically after a certain period of time has passed. • Sleep Timer: Menu → System → Time → Sleep Timer If the Sleep Timer is not activated, you may have engaged the No Signal Power Off or Auto Power Off feature. • No Signal Power Off: Menu → System → Eco Solution → No Signal Power Off • Auto Power Off: Menu → System → Eco Solution → Auto Power Off

Other Information

Issues	Solutions and Explanations
Trouble Powering On	Before you turn the product on, find the red light on the right or left bottom of your product. Press the power on button on the product or remote and the light should blink about 5 times before the product turns on. If you find that you are having trouble powering on your Samsung television, there are a number of things to check before making a call to the service department. • If you happen to be using the product as a monitor and the stand-by light only blinks for a few seconds when you press the power button, your PC is in sleep mode. To take your PC out of sleep mode, press a key on your keyboard or move the mouse. Then try turning your product on. If you're sure your power cord, remote control, and PC are functioning properly, you may be having a cable issue. If you have a cable or satellite box, your product may appear to be off because the cable or satellite box is not outputting a signal. To test the signal output of your cable or satellite box, press the guide or info button on the cable or satellite box remote control. If the screen displays the guide or info data, the problem is caused by the box.
Cannot Find a Channel	Re-run Setup (Go to Menu → System → Setup) or run Auto Tuning. (Go to Menu → Channel → Auto Tuning).

Other Information

Issues	Solutions and Explanations
PC Connection	
A Mode Not Supported message appears.	Set your PC's output resolution so it matches a resolution supported by the product.
"PC" is always shown on the source list, even if a PC is not connected.	This is normal. "PC" is always shown in the source list, regardless of whether a PC is connected.
The video is OK but there is no audio.	If you are using an HDMI connection, check the audio output setting on your PC.
Picture	First, perform the Picture Test and to see if your product is properly displaying the test image (go to Menu → Support → Self Diagnosis → Picture Test). If the test image is properly displayed, the poor picture may be caused by the source or signal.
The product image does not look as good as it did in the store.	Store displays are all tuned to digital, HD (high definition) channels. If you have an analog cable/set top box, upgrade to a digital set top box. Use HDMI or Component cables to deliver HD (high definition) picture quality. ✎ Many HD channels are up scaled from SD (Standard Definition) contents. Look for a channel that is broadcasting true HD content. • Cable/Satellite subscribers: Try HD channels from the channel line up. • Air/Cable Aerial connection: Try HD channels after performing an Auto Tuning. Adjust the Cable/Sat box video output resolution to 1080i or 720p.
The picture is distorted: macro block error, small block, dots, pixelization	The compression of video contents may cause picture distortion especially in fast moving pictures such as sports and action movies. A weak or bad quality signal can cause picture distortion. This is not a product issue. Mobile phones used close to the product (within 3.3 ft) may cause noise in the picture on analog and digital channels.
Colour is wrong or missing.	If you're using a Component connection, make sure the component cables are connected to the correct jacks. Incorrect or loose connections may cause colour problems or a blank screen.
The colour is poor or the picture is not bright enough.	Adjust the Picture options in the product menu (go to Picture Mode / Colour / Brightness / Sharpness) Adjust the Energy Saving option in the product menu (go to Menu → System → Eco Solution → Energy Saving) Try resetting the picture to view the default picture settings (go to Menu → Picture → Reset Picture).

Other Information

Issues	Solutions and Explanations
There is a dotted line on the edge of the screen.	If the Picture Size is set to Screen Fit, change it to 16:9. Change the cable/satellite box resolution.
The picture is black and white.	If you are using an AV composite input, connect the video cable (yellow) to the Green jack of Component on the product
When changing channels, the picture freezes or is distorted or delayed.	If the product is connected to a cable box, try to reset the box. (Disconnect and then reconnect the AC cord and wait until the cable box reboots. It may take up to 20 minutes.) Set the output resolution of the cable box to 1080i or 720p.
Sound	First, perform the Sound Test to determine if your product audio is operating properly. (Go to Menu → Support → Self Diagnosis → Sound Test). If the audio is OK, the sound problem may caused by the source or signal.
There is no sound or the sound is too low at maximum volume.	Please check the volume of the device (Cable/Sat Box, DVD, Blu-ray etc.) connected to your product.
The picture is good but there is no sound.	Set the Speaker Select option to TV Speaker in the Sound menu. If you are using an external device, check the device's audio output option. (Ex. You may need to change your cable box's audio option to HDMI if you have the box connected to your product using an HDMI cable.) If you are using a DVI to HDMI cable, a separate audio cable is required. If your product has a headphone jack, make sure there is nothing plugged into it. Reboot the connected device by disconnecting, and then reconnecting device's power cable.
The speakers are making an inappropriate noise.	Check cable connections. Make sure a video cable is not connected to an audio input. For aerial or cable connections, check the signal information. A low signal level may cause sound distortion. Perform the Sound Test feature. (Menu → Support → Self Diagnosis → Sound Test)
RF (Cable / Aerial) Connection	
The product is not receiving all channels.	Make sure the coaxial cable is connected securely. Please try Setup to add available channels to the channel list. Go to Menu → System → Setup and wait for all available channels to be stored. Verify the aerial is positioned correctly.
The picture is distorted: macro block error, small block, dots, pixelization.	The compression of video contents may cause picture distortion, especially with fast moving pictures such as sports and action movies. A weak signal can cause picture distortion. This is not a product problem.

Other Information

Issues	Solutions and Explanations
Network Connection	
The wireless network connection failed.	Make sure the product is connected to a wireless IP sharer (router).
Software Upgrade over the network fails.	Run Network Status in Network menu to confirm the connection. If you have latest Software (SW) version, SW upgrade will not proceed.
Others	
Purple/green rolling horizontal bars and buzzing noise from the product speakers with a Component cable connection.	Remove the left and right audio connections from the Set-Top box. If the buzzing stops, this indicates that the Set-Top box has a grounding issue. Replace the Component video cables with an HDMI connection.
The picture won't display in full screen.	HD channels will have black bars on either side of the screen when displaying up scaled SD (4:3) contents. Black bars will appear on the top and bottom of the screen when you watch movies that have aspect ratios different from your product. Adjust the picture size options on your external device or the product to full screen.
A Mode Not Supported message appears.	Check the supported resolution of the product, and adjust the external device's output resolution accordingly. Refer to the resolution settings of this manual.
There is a plastic smell from the product.	This smell is normal and will dissipate over time.
The product Signal Information is unavailable in the Self Diagnosis menu.	This function is only available for digital channels the product receives from an Aerial / RF /Coax connection.
The product is tilted to the side.	Remove the base stand from the product and reassemble it.
The channel menu is grayed out (unavailable).	The Channel menu is only available when you select the product source.
Your settings are lost after 30 minutes or every time the product is turned off.	If the product is in the Store Demo mode, it will reset audio and picture settings every 30 minutes. Change the settings from Store Demo mode to Home Use mode using the Setup procedure. Select TV in the Source using your remote, and go to Menu → System → Setup.

Other Information

Issues	Solutions and Explanations
You have intermittent loss of audio or video.	Check the cable connections and reconnect them. Loss of audio or video can be caused by using overly rigid or thick cables. Make sure the cables are flexible enough for long term use. If mounting the product to a wall, we recommend using cables with 90 degree connectors.
You see small particles when you look closely at the edge of the frame of the product.	This is part of the product's design and is not a defect.
The PIP menu is not available.	PIP functionality is only available when you are using an HDMI, or Component source.
POP (product's internal banner ad) appears on the screen.	Select Home Use under Setup mode. For details, refer to the Setup Feature. ✎ Watch these troubleshooting on video at www.samsung.com ✎ Some functions and pictures shown in this manual are available on specific models only. ✎ To keep your product in optimum condition, upgrade to the latest firmware on the Samsung web site by USB (samsung.com → Support → Downloads).
The product won't turn on.	Make sure the AC power cord is securely plugged in to the wall outlet and the product. Make sure the wall outlet is working. Try pressing the ⏻ button on the product to make sure the problem is not the remote. If the product turns on, refer to "Remote control does not work" below.
There is no picture/video.	Check the cable connections. Remove and reconnect all cables connected to the product and external devices. Set the video outputs of your external devices (Cable/Sat Box, DVD, Blu-ray etc) to match the product's input connections. For example, if an external device's output is HDMI, it should be connected to an HDMI input on the product. Make sure your connected devices are powered on. Be sure to select the correct input source Reboot the connected device by unplugging it, and then reconnecting the device's power cable.
The remote control does not work.	Replace the remote control batteries. Make sure the batteries are installed with their poles (+/–) in the correct direction. Clean the sensor's transmission window on the remote. Try pointing the remote directly at the product from 5~6 feet away.
The cable/set top box remote control doesn't turn the product on or off, or adjust the volume.	Programme the Cable/Set remote control to operate the product. Refer to the Cable/Set-Top-Box user manual for the SAMSUNG product code.

Other Information

Issues	Solutions and Explanations
Intel ® WiDi Connection	
Unable to establish a WiDi connection.	It is recommended using the laptop within a 3m radius of the product. You may encounter a connection failure or scrambled screen in a multiple router environment such as an office. Since WiDi is used to handle real-time streaming, you may encounter a scrambled signal in the case of electric interference. Check if there may be electric interference around the product and relocate the product as far as possible from such a location i.e. a transmission tower, microwave oven or other electromagnetic generating environment.)
WiDi is not displayed in the Source list after initial power on.	It takes about 20 seconds to authorize the wireless connection of the external/internal WiFi module. Please wait a moment. If the problem persists, this is caused by a defective wireless module or the incorrect wiring of the cables between the modules.
A scrambled screen occurs at regular intervals.	The product may be affected by the surrounding radio signals. Do not place objects that can cause electric interference between the product and the PC/laptop computer. – If the product is too close to the laptop computer, the WiDi performance may be deteriorated. It is recommended maintaining the recommended distance between them. – A microwave oven and vacuum cleaner can cause electric interference with a WiDi signal. Therefore, stop operating these devices when using the WiDi feature. – A transmission tower, microwave oven or other electromagnetic generating device can cause a scrambled screen. Keep the product away from such devices as much as possible.
Can I update the software driver while in WiDi mode?	If you update or delete the wireless/graphic software driver while using WiDi to wirelessly connect between the product and the laptop computer, the WiDi adapter will be disconnected leading to a system failure. Remove the WiDi connection before updating the software driver.
If the adapter is disconnected, no sound will be output from the Programme.	Exit the Programme and adjust the volume of the laptop computer manually.
If you change the WiDi-based wireless LAN settings, you may encounter a temporary scrambled or disconnected adapter.	Do not change the wireless LAN settings while in WiDi mode.

Other Information

Issues	Solutions and Explanations
If the product is too far away from the laptop computer, the playback performance of the product will deteriorate accordingly.	It is recommended maintaining the ideal distance between them.
How can I access the extended video feature in WiDi mode?	If the product supports 1080p HD video but your laptop computer does not, you can still play a 1080p HD video on the product. To take advantage of the extended video (1080p HD) feature in WiDi mode, follow the steps below: **1.** Use the Windows key + P key combination on the keyboard to select Extend. This will switch the mode to Extended Desktop mode. **2.** Change the screen resolution to 1920x1080 for the extended desktop mode. **3.** Move the video player to the extended desktop screen. **4.** Maximize the video player screen before playing the 1080p video source.
In WiDi mode, the mouse pointer seems to move slowly.	Since WiDi will have a 0.3 second delay in processing the signal, you may encounter a slower reaction of the keyboard and the mouse. In a mode that requires a faster reaction such as a PC game, use a wired connection such as PC/HDMI mode rather than WiDi.
I want to change the size of the WiDi screen.	In WiDi mode, only the original size of the video source is supported.
How can I obtain the WiDi software driver?	Consult with the manufacturer of your laptop computer. The software driver downloaded from the Intel ® homepage may not work properly. For more information about the specifications, the latest software driver and other related tools, contact the manufacturer of your laptop computer.
When I change the screen resolution, I experience temporary interference on the screen.	If you change the screen resolution in WiDi mode, you may encounter temporary interference on the screen.
I cannot resize the video screen on the product with the WiDi Programme on my laptop computer.	The resizing menu of the WiDi Programme is only enabled with a separate external WiDi adapter. The product is not compliant with the adapter.
I have searched for available WiDi adapters on my laptop but cannot establish a connection.	WiDi can be greatly affected by the wireless communications environment. This is why you may encounter a connection failure from time to time. Please try again in a moment.
The full HD (1920 X 1080) video displays blurry characters.	WiDi by its nature, displays the video in a downsized resolution. To improve the sharpness, contact the manufacturer of your laptop computer for the latest software driver.

Other Information

Issues	Solutions and Explanations
MHL Connection	
How can I change the size of MHL?	The product only supports Screen Fit when you using MHL function.
MHL charging seems slow.	The monitor supports 500mA for charging purposes (MHL 1.1). If the mobile device is on, charging the product fully takes more time due to battery consumption. Therefore, it is recommended turning off the mobile device for faster charging.
There is white space on the edge of screen.	Even though the monitor displays 100% of the screen, since some mobile devices transmit a downscaled image, there could be some white space on the monitor. This is not a monitor problem but an issue caused by the downscaled image from the mobile device. (This issue happens with HCT devices).
When playing a video file, pressing ►, ■, ◄◄, ►► buttons on the remote do not work on mobile devices.	Some mobile devices do not support the remote control feature. If a monitor cannot control the mobile device, it is not a monitor problem. Some applications and games also do not support the remote control feature and this is also not a monitor problem.
Anynet+ (HDMI-CEC)	
Anynet+ does not work.	Check if the device is an Anynet+ device. The Anynet+ system supports Anynet+ devices only. You can connect only one receiver (home theatre). Check if the Anynet+ device power cord is properly connected. Check the Anynet+ device's Video/Audio/HDMI cable connections. Check whether Anynet+ (HDMI-CEC) is set to On in the Anynet+ setup menu. Check whether the product remote control is in product mode. Check whether the remote control is Anynet+ compatible. Anynet+ doesn't work in certain situations. (Searching channels, operating Smart Hub or Setup, etc.) If you have removed and then reconnected the HDMI cable, please make sure to search devices again or turn your product off and on again.
I want to start Anynet+.	Check if the Anynet+ device is properly connected to the product and check if the Anynet+ (HDMI-CEC) is set to On. (System → Anynet+ (HDMI-CEC)) Open the Tools menu using your remote and then select Anynet+ (HDMI-CEC). Then select a menu you want.
I want to exit Anynet+.	Select View TV in the Anynet+ menu. Go to Source screen using your remote and select a non-Anynet+ device.
The message Connecting to Anynet+ device ... appears on the screen.	You cannot use the remote control when you are configuring Anynet+ or switching to a view mode. Use the remote control after the product has completed Anynet+ configuration or has finished switching to Anynet+.

Other Information

Issues	Solutions and Explanations
The Anynet+ device does not play.	You cannot use the play function when Setup is in progress.
The connected device is not displayed.	Check whether or not the device supports Anynet+ functions. Check whether or not the HDMI cable is properly connected. Check whether Anynet+ (HDMI-CEC) is set to On. (System → Anynet+ (HDMI-CEC)) Search Anynet+ devices again. Anynet+ requires an HDMI connection. Make sure the device is connected to your product with an HDMI cable. Some HDMI cables may not support Anynet+ functions. If the connection is terminated because there has been a power failure or the HDMI cable has been disconnected, please repeat the device scan.
The product sound is not output through the receiver.	Connect the optical cable between product and the receiver. The ARC function enables digital output of sound using the **HDMI IN 2 (MHL / ARC)** port and can only be operated when the product is connected to an audio receiver that supports the ARC function.
AllShare Play	
This file may not be playable properly.	This may appear because of high bit rate of content. Content generally will play but could experience some playability issue.
Smart Hub	
Some application contents only appear in English. How can I change the language?	The Application content language may be different from the application user interface language. The ability to change the language depends on the service provider.
Some application services do not work.	Check with the service provider. Refer to the help website for application service provider information.
When a network error occurs, I can only use the setting menu.	If network connection doesn't work, your service might be limited, as all functions except the setting menu are needed to connect to the internet. ✎ Watch these troubleshooting on video at www.samsung.com

✎ Some functions and pictures shown in this manual are available on specific models only.

✎ To keep your product in optimum condition, upgrade to the latest firmware on the Samsung web site by USB (samsung.com → Support → Downloads).

Other Information

Web Browser

1. To open Web Browser, select Web Browser in the Smart Hub. The Web Browser may be displayed differently with PC.
2. The Web Browser is not compatible with a Java application.
3. When attempted to download a file, but the file could not be saved and an error message appeared.
4. Access may be blocked to some websites or to web browsers operated by certain businesses.
5. Playback of Flash video may be restricted.
6. E-commerce, for purchasing products online, is not supported.
7. Scrolling a web page that allows only part (and not the whole) of the page to be scrolled may cause corrupted characters.
8. ActiveX is not supported.
9. Some options cannot be accessed in Link Browsing mode. (To access such options, switch to Pointer Browsing mode.)
10. Some text may appear corrupted because the number of supported fonts is limited.
11. The response to a command on the remote or the screen display may be delayed temporarily if a web page is currently loading.
12. The loading of a web page may delay or stop with some operating systems.
13. Copy and Paste are not supported.
14. When writing emails or posting messages, some functions (Such as changing the size or colours.) may not be supported.
15. The number of bookmarks and logs that can be saved is limited.
16. The maximum number of windows that can open at the same time may vary depending on the browsing condition or product model.
17. The web browsing speed depends on the network conditions.
18. PIP will automatically be deactivated if a video is played in the browser. Videos may not commence playback after PIP interruption and a possible refresh for the page may be required.
19. The Web Browser can play MP3 audio files only.
20. The function for importing or exporting bookmarks is compatible with bookmark files in a particular file format only. (Compatible format: Netscape-bookmarkfile- 1)
21. When you import or export the bookmark, the folder tree is not included.
22. If you import the bookmark file to a Computer from a product, the bookmark file will be saved in “Samsung SmartTV Bookmark” folder.
23. If the time is not set in the menu (System → Time → Clock), the history information may not be saved.
24. Visited web site history is saved in chronological order and It will be removed from the list according to oldest page accessed.
25. Some video or audio content may not play during Flash playback depending on the video/audio codec supported.

Supported Subtitle and AllShare Play file formats

Subtitle

External

- MPEG-4 timed text (.ttxt)
- SAMI (.smi)
- SubRip (.srt)
- SubViewer (.sub)
- Micro DVD (.sub or .txt)
- SubStation Alpha (.ssa)
- Advanced SubStation Alpha (.ass)
- Powerdivx (.psb)

Internal

- **Xsub**

  Container: AVI
- **SubStation Alpha**

  Container: MKV
- **Advanced SubStation Alpha**

  Container: MKV
- **SubRip**

  Container: MKV
- **MPEG-4 timed text**

  Container: MP4

Supported image resolutions

File Extension	Type	Resolution
*.jpg	JPG	15360 x 8640
*.png	PNG	1920 x 1080
*.bmp	BMP	1920 x 1080
*.mpo	MPO	15360 x 8640

Other Information

Supported music file formats

File Extension	Type	Codec	Comments
*.mp3	MP3	MPEG1 Audio Layer 3	
*.m4a *.mpa *.aac *.3ga	MPEG4	AAC	
*.flac	FLAC	FLAC	The Seek (jump) function is not supported. Supports up to 2 channel
*.ogg	OGG	Vorbis	Supports up to 2 channel
*.wma	WMA	WMA	WMA 10 Pro supports up to 5.1 channel. WMA lossless audio is not supported.

Video Codec

File Extension	Container	Video Codec	Resolution	Frame rate (fps)	Bit rate (Mbps)	Audio Codec
*.avi *.mkv *.asf *.wmv *.mp4 *.3gp *.vro *.mpg *.mpeg *.ts *.tp *.trp *.m2ts *.mts *.webm *.divx	AVI MKV ASF MP4 3GP VRO VOB PS TS WebM	DIVX 3.11/4.x/5.x/6.1	1920 x 1080	6 – 30	30	AC3 LPCM ADMPCM(IMA, MS) AAC HE-AAC WMA DD+ MPEG(MP3) DTS Core Vorbis
		MPEG4 SP/ASP				
		H.264 BP/MP/HP				
		Motion JPEG	640 x 480		8	
		Window Media Video v9	1920 x 1080		30	
		MPEG2				
		MPEG1				
		VP8				
		VP6	640 x 480		4	

Other Information

Other Restriction

✎ Video content will not play, or not play correctly, if there is an error in the content or the container.

✎ Sound or video may not work if the contents have a standard bit rate/frame rate above the compatible Frame/sec listed in the table above.

✎ If the Index Table is in error, the Seek (Jump) function is not supported.

✎ When you play video over a network connection, the video may not be played smoothly.

✎ The menu may take longer to appear if the video's bit rate exceeds 10Mbps.

✎ Some USB/digital camera devices may not be compatible with the player.

Video decoder

- Supports up to H.264, Level 4.1.
- H.264 FMO / ASO / RS, VC1 SP / MP / AP L4 and AVCHD are not supported.
- For all Video codecs except MVC, VP8, VP6:
  - Below 1280 x 720: 60 frame max
  - Above 1280 x 720: 30 frame max
  - GMC is not supported.
- Supports only SVAF Top/Bottom and Side by Side.
- Supports only BD MVC Spec.

Audio decoder

- WMA 9, 10 Pro supports up to 5.1 channel and M2 profile (except LBR mode of M0).
- WMA lossless audio is not supported.
- If Vorbis is only in Webm container, supports up to 2 channel.

Other Information

Analogue Channel Teletext Feature

The index page of the Teletext service gives you information on how to use the service. For Teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

✎ You can change Teletext pages by pressing the numeric buttons on the remote control.

❶ (Teletext on/mix/off): Activates the Teletext mode for the current channel. Press the button twice to overlap the Teletext mode with the current broadcasting screen. Press it one more time to exit teletext.

❷ (store): Stores the Teletext pages.

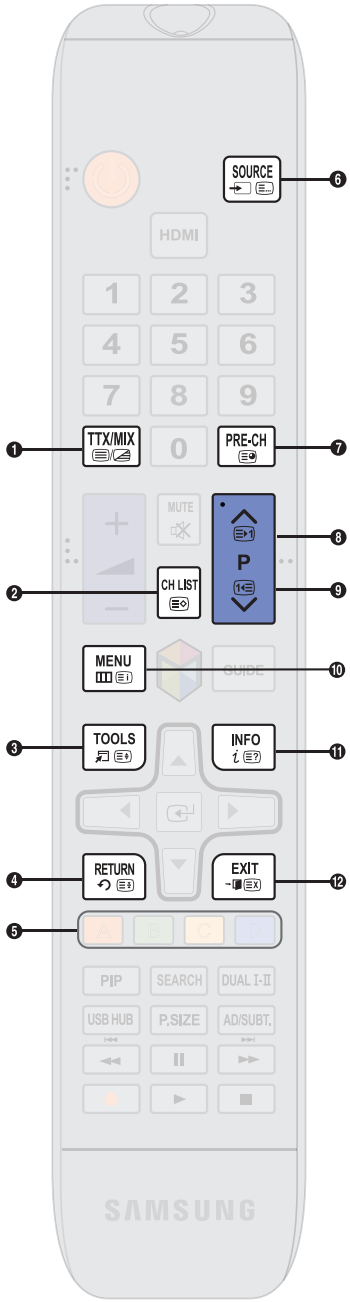
❸ (size): Displays the teletext on the upper half of the screen in double-size. To move the text to the lower half of the screen, press it again. For normal display, press it once again.

❹ (hold): Holds the display at the current page, in the case that there are several secondary pages that follow automaticially. To undo, press it again.

❺ Colour buttons (red, green, yellow, blue): If the FASTEXT system is used by the broadcasting company, the different topics on a Teletext page are colour-coded and can be selected by pressing the coloured buttons. Press the colour corresponding to the topic of your choice. A new colourcoded page is displayed. Items can be selected in the same way. To display the previous or next page, press the corresponding coloured button.

❻ (mode): Selects the Teletext mode (LIST/ FLOF). If pressed during LIST mode, switches the mode to List save mode. In List save mode, you can save a Teletext page into a list using the 8(store) button.

❼ (sub-page): Displays the available sub-page.



❽ (page up): Displays the next Teletext page.

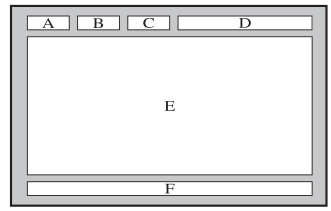
❾ (page down): Displays the previous Teletext page.

❿ 6 (index): Displays the index (contents) page at any time while you are viewing Teletext.

⓫ 5 (reveal): Displays the hidden text (answers to quiz games, for example). To display the normal screen, press it again.

⓬ (cancel): Shrinks the Teletext display to overlap with the current broadcast.

Typical Teletext page



Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information. FASTEXT information.

Other Information

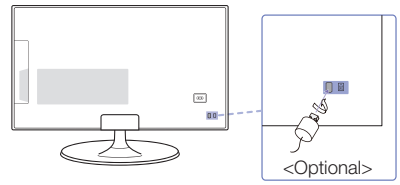
Anti-theft Kensington Lock

A Kensington Lock is a device you can use to physically fix your product in place when using it in a public place.

You wrap the Kensington Lock's cable around a large, immobile object and then attach the lock to the Kensington slot on the back of the product.

The appearance and locking method may differ from the illustration below depending on the manufacturer. Refer to the manual provided with the Kensington Lock for additional information on proper use. The Kensington Lock is not supplied by Samsung.

✎ Please find a "🔒" icon on the rear of the product. The Kensington slot is beside the "🔒" icon.



To lock the product, follow these steps:

1. Wrap the Kensington Lock cable around a large, stationary object such as desk or chair.
2. Slide the end of the cable with the lock attached through the looped end of the Kensington Lock cable.
3. Insert the locking device into the Kensington slot on the product.
4. Lock the lock.

✎ These are general instructions. For exact instructions, see the User manual supplied with the locking device.

✎ The locking device has to be purchased separately.

✎ The location of the Kensington slot may be different depending on the product model.

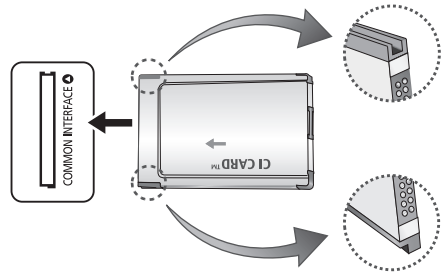
Other Information

Connecting to a COMMON INTERFACE slot (Your product viewing Card Slot)

Using the “CI or CI+ CARD”

To watch paid channels, the “CI or CI+ CARD” must be inserted.

- If you don’t insert the “CI or CI+ CARD”, some channels will display the message “Scrambled Signal”.
- The pairing information containing a telephone number, the “CI or CI+ CARD” ID the Host ID and other information will be displayed in about 2~3 minutes. If an error message is displayed, please contact your service provider.
- When the configuration of channel information has finished, the message “Updating Completed” is displayed, indicating the channel list is updated.



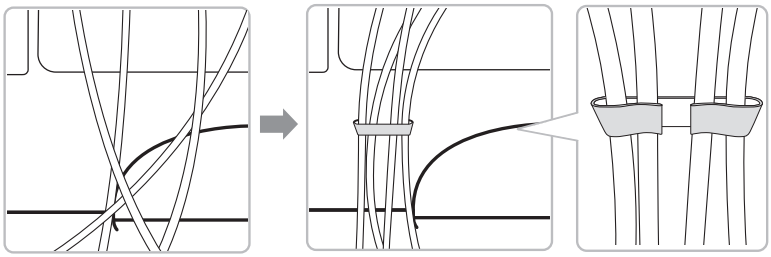
✎ **NOTE**

- You must obtain a “CI or CI+ CARD” from a local cable service provider.
- When removing the “CI or CI+ CARD”, carefully pull it out with your hands since dropping the “CI or CI+ CARD” may cause damage to it.
- Insert the “CI or CI+ CARD” in the direction marked on the card.
- The location of the COMMON INTERFACE slot may be different depending on the model.
- “CI or CI+ CARD” is not supported in some countries and regions; check with your authorized dealer.
- If you have any problems, please contact a service provider.
- Insert the “CI or CI+ CARD” that supports the current aerial settings. The screen will be distorted or will not be seen.

Other Information

Assembling the Cables

Use the Cable Holder to hide the cables behind the stand.



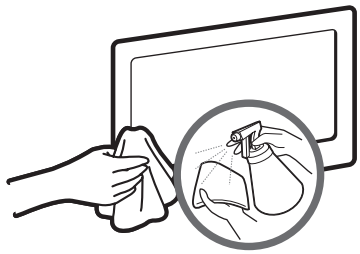
✎ The colour and the appearance may differ depending on the product, and the specifications are subject to change without prior notice to improve the performance.

Storage and Maintenance

If a sticker was attached to the product screen, some debris can remain after you remove the sticker. Please clean the debris off before watching product.

The exterior and screen of the product can get scratched during cleaning. Be sure to wipe the exterior and screen carefully using the cloth provided or a soft cloth to prevent scratches.

Do not spray water directly onto the product. Any liquid that goes into the product may cause a failure, fire, or electric shock.



Clean the product with a soft cloth dampened with a small amount of water. Do not use a flammable liquid (e.g. benzene, thinners) or a cleaning agent.

Other Information

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TheatreSound HD technology is incorporated under licence form SRS Lab, Inc.

Manufactured under licence from Dolby Laboratories. Dolby and the double-D symbol are trademarks of Dolby Laboratories.

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ABOUT DIVX VIDEO-ON-DEMAND: This DivX Certified® device must be registered in order to play purchased DivX Video-on-Demand (VOD) movies. To obtain your registration code, locate the DivX VOD section in your device setup menu. Go to vod.divx.com for more information on how to complete your registration.

Covered by one or more of the following U.S. patents: 7,295,673; 7,460,668; 7,515,710; 7,519,274

Open Source Licence Notice

In the case of using open source software, Open Source Licences are available on the product menu.

Open Source Licence Notice is written only English.

The terms HDMI and HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing LLC in the United States and other countries.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product
(Applicable in the European Union and other European countries with separate battery return systems)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment. To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

Other Information

Specifications

Environmental considerations	Operating	Temperature : 10°C~ 40°C Humidity : 10 % ~ 80 %, non-condensing	
	Storage	Temperature : -20°C ~ 45°C Humidity : 5 % ~ 95 %, non-condensing	
Tilt		-1° (±1°) ~ 20° (±1°)	
TV System		Analogue: B/G, D/K, L, I (Depending on your country selection) Digital: DVB-T/DVB-C	
Colour/Video System		Analogue: PAL, SECAM, NTSC-4.43, NTSC-3.58, PAL60 Digital: MPEG-2 MP@ML, MPEG-4, H.264/AVC MP@L3, MP@L4.0, HP@L4.0	
Sound System		BG, DK, L, NICAM, MPEG1, DD, DD+, HEAAC	
HDMI IN		Video: 1080 24p, 1080p, 1080i, 720p, 576p, 480p Audio: 2Ch Linear PCM 32/44.1/48kHz, 16/20/24bits.	
Model Name		T23B550	T27B550
Screen Size (Diagonal)		23 inches (58 cm)	27 inches (68 cm)
Display Resolution		1920x1080 @ 60Hz	1920x1080 @ 60Hz
Sound (Output)		5W x 2	5W x 2
Dimensions (W x H x D)	With stand	553.0 x 410.0 x 195.0 mm	650.0 x 467.0 x 252.0 mm
	Body	553.0 x 336.0 x 49.5 mm	650.0 x 394.0 x 53.0 mm
Weight	With stand	4.1 kg	5.9 kg
	Body	3.8 kg	5.4 kg

✎ Design and specifications are subject to change without prior notice.

✎ For information about power supply, and more about power consumption, refer to the label attached to the product.

✎ Some models may not be available for purchase depending on the region.

✎ If there is no power cut-off switch, the power consumption is "0" only when the power cord is disconnected.

✎ DPM(Display Power Management) Function does not work if you used in conjunction with the **HDMI IN 1 (DVI)** port of this product.

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SAMSUNG

Contact SAMSUNG WORLDWIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

Country	Customer Care Centre ☎	Web Site
ALBANIA	42 27 5755	-
AUSTRIA	0810 - SAMSUNG (7267864, € 0.07/min)	www.samsung.com
BELGIUM	02-201-24-18	www.samsung.com/be (Dutch) www.samsung.com/be_fr (French)
BOSNIA	05 133 1999	-
BULGARIA	07001 33 11	www.samsung.com
CROATIA	062 SAMSUNG (062 726 7864)	www.samsung.com
CZECH	800 - SAMSUNG (800-726786)	www.samsung.com
	Samsung Zrt., česká organizační složka, Oasis Florenc, Sokolovská394/17, 180 00, Praha 8	
DENMARK	70 70 19 70	www.samsung.com
FINLAND	030 - 6227 515	www.samsung.com
FRANCE	01 48 63 00 00	www.samsung.com
GERMANY	01805 - SAMSUNG (726-7864 0,14 €/Min. aus dem dt. Festnetz, aus Mobilfunknetzen max. 0,42 €/Min.)	www.samsung.com
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